ENGINEERING NEWS-RECORD

ped concrete speeds construction of Iowa approach for new Mississippi River Bridge at Dubuque.

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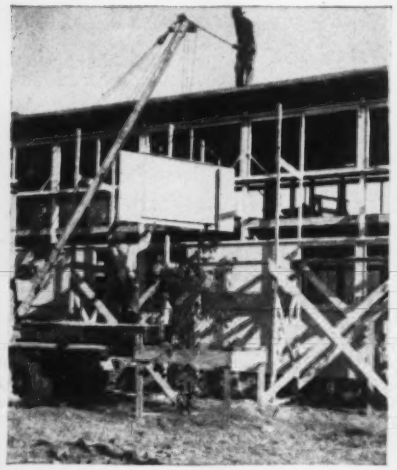
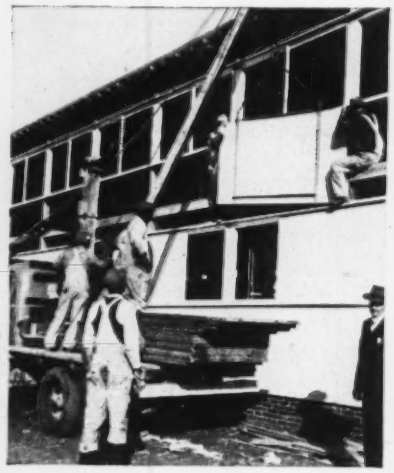
With Minimum Use of Critical Materials!

CELOTEX CEMESTO is more than a revolutionary new building material. It makes possible a whole new method of construction—equally applicable to wartime housing and wartime factory construction. Each section of Cemesto is a complete wall unit—replacing *all* the many materials which go to make a conventional wall, including exterior and interior finish! *And insulation!*

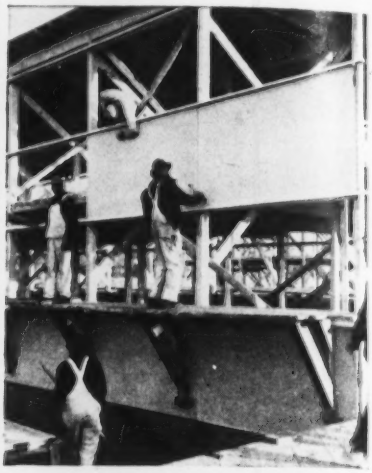
TIME—LUMBER—NAILS—these are three of the most important savings in Cemesto construction, under existing emergency conditions. These pictures show progress during the building of women's dormitories in the West Potomac Park Project at Washington, D. C.



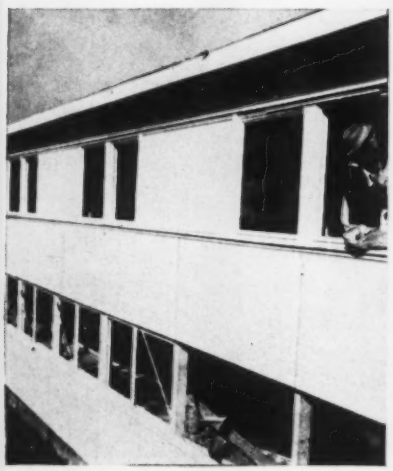
Cemesto handles easily, but this contractor gains speed by using the erection rig shown.



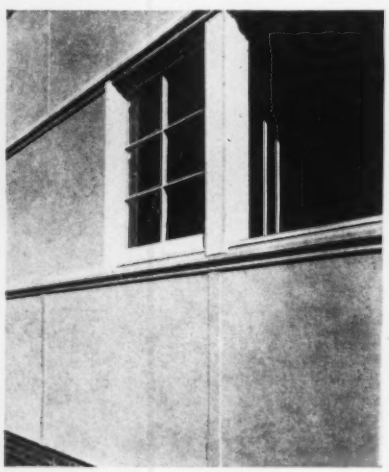
Workmen swing another Cemesto section into place . . . ready to be nailed to the columns.



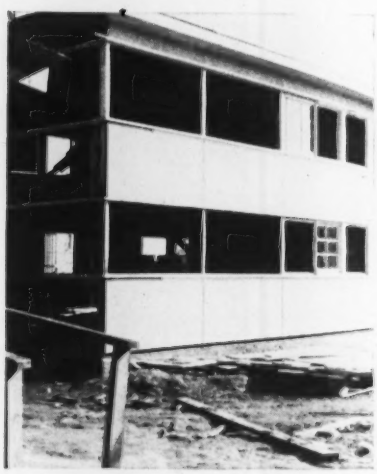
Cemesto's strength does away with need for intermediate support, saves lumber and nailing.



Good-looking, permanent Cemesto wall will never need painting or other exterior finish.



Close-up shows battened joint, inconspicuous, weatherproof; permanently vermin-proof, too.



Building will be ten wing, 2 stories, over 500 ft. long, over 240 ft. wide, for 600 occupants.

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—is a fire- and moisture-resistant wall unit composed of a cane fibre insulation core with asbestos cement covering on both sides. It is a combined material making a rugged insulated wall section with complete exterior and interior surfaces. For complete information on Cemesto housing and dormitory construction, write for 28-page booklet, "A Vital Contribution." ***FREE!***

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The Week In Engineering and Construction

ENGINEERING NEWS-RECORD • DECEMBER 24, 1942 • VOLUME 129 • NUMBER 26

Army, Navy outline plan for technical training program

Joint service announcement seen as partial solution to problem of continuing technical training of young men; many colleges and universities to be used to train men for the armed forces

The question of how technical training of young men is to be kept going through the war was partially resolved last week.

It has been a pressing problem ever since the 18-19 year old draft became law. There are three main problems to be met: training of young technical men for the Army, for the Navy, and for war industry. Lines of solution for the first two were roughly laid out last week, and the third is still in suspense.

The two armed services, working with the War Manpower Commission, are now completing plans to send selected enlisted men, in uniform and drawing pay, to colleges and universities for technical training. Contracts will be made with schools having facilities to house and feed as well as to instruct the minimum unit of around 300 men. The schools to be used—which may run to several hundred—are now being selected by a joint committee headed by Capt. B. L. Canaga. Selection is based on the educational and physical facilities which the schools can offer. There will probably be a degree of specialization—one school concentrating on, say, Signal Corps training, another on Navy courses.

The Army training plan

The two services differ considerably in the kind of training they expect to offer. The Army, primarily, wants short courses giving men quick training in specialized skills. Enlisted men under 22 who have completed or are undergoing the three-months basic training course are eligible. They will be picked on much the same standards as are officer candidates. Leadership possibilities as well as strictly intellectual qualifications will be considered.

On successful completion of the courses, men will either be given technical non-commissioned rank or will be sent to officer candidate schools.

The Army insists on all men taking its 13-week basic training course, during which period those men who are to be sent to college for specialist training will be selected.

Third year students in the enlisted reserve corps or those inducted before June 30, 1943, who are pursuing approved engineering courses will continue in an inactive status until the end of the next academic semester. All other enlisted reserve corps students will be called to active duty at the end of the current semester.

Exceptional students may be detailed for very advanced technical training or for war industry work outside the Army.

Longer training for Navy

The Navy leans more to longer, more fully rounded training. Except for men already enlisted, who will be accepted up to the age of 22, only men between 17 and 19 will be eligible. These men will be selected by examination in high school or college, and about June 1 will be assigned directly to a college without a basic training course such as the Army requires. These boys may express their preference as to the branch of service and the college where they are to be trained, but these preferences will not be binding. Ultimate assignment will be based on demonstrated ability in the first eight months of training.

Navy courses will range from eight months up to three years, which latter course, on the accelerated basis, is equivalent to a regular four-year technical curriculum.

Detailed content of the courses will not be known until the War Manpower Commission completes the drafting of regulations now in preparation.

Probably the majority of the men assigned to colleges for the Navy program will be in fields other than engineering, in work that ordinarily would come under the jurisdiction of the arts school rather than the engineering school. For example, the "deck" training includes only elementary engineering plus navigation.

Men for War industry

It is recognized that industry, as well

Press Assn. photo

Jungle bridge aids New Guinea advance

Engineer troops of the combined American and Australian forces under Gen. Douglas MacArthur wrestle with local materials in this action photograph, to build a bridge over a small side gully to permit heavy motorized equipment to proceed rapidly toward the fighting front in the Buna region of New Guinea. These troops are in advance of the main body, working with greatest possible speed to clear a road through the thick jungle growth.

as the military services, require technically trained men.

Plans are now being worked out by which certain students will be deferred from military service and trained for industrial work, but these plans are still in a very preliminary stage.

Meanwhile, to prevent decimation of the student bodies while this plan is being worked out, WMC's Bureau of Selective Service has instructed local draft boards to grant deferments to students and faculties of engineering colleges.

Graduate students or undergraduates who have completed one year's training are to be deferred until the end of the semester underway March 1. Instructors are to be deferred until July 1.

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Alaska railway plans dropped for the present

After consideration of results of a survey of a proposed trans-Canadian railroad to Alaska (*ENR*, Dec. 3, p. 758), the War Department has announced that no military necessity exists for its construction at the present time.

The survey of the railroad—planned to supplement the Alcan Highway—was completed by the Corps of Engineers with the cooperation of the Canadian government.

As projected, the railway would have extended from Prince George, on the Canadian National Railway in British Columbia, through British Columbia and Yukon Territory to connect with the Alaska Railroad at Kobe.

A.G.C., A.R.E.A. cancel annual meetings

Due to wartime restrictions on travel, and preoccupation of many members with wartime problems, the Associated General Contractors of America and the American Railway Engineering Association last week announced cancellation of plans for their annual meetings. The A.G.C. convention, usually held in February, will be dropped in favor of a small meeting of the governing and advisory board and chapter secretaries and managers, to be held probably at some midwest location in February. New officers named at a recent governing and advisory board meeting, will be installed at the substitute session.

The annual meeting of the American Railway Engineering Association, originally scheduled for Chicago March 16-18, was cancelled by the board of direction.

Committee reports are being sent to the members in the A.R.E.A. bulletins, and action calling for vote by the membership will be submitted to letter ballot.

No new officers will be elected this year, the term of each being extended for one year.

The A.G.C.'s slate of new officers includes: Oscar B. Coblentz of Baltimore, president; and William Muirhead of Durham, N. C., vice-president.

FIRE recently destroyed Carrick Hall, engineering building at the University of Tennessee. The 60 year old building was a three-story structure. Much laboratory equipment was destroyed including a large number of slide rules.

New York sewage group convention dates set

The annual meeting of the New York State Sewage Works Association will be held at the Hotel McAlpin in New York City January 22, 1943, according to a preliminary announcement last week.

In accordance with a custom of long standing, the meeting will follow the annual meeting of the Sanitary Division of the American Society of Civil Engineers, to be held January 21.

A special feature of the New York group's session will be a forum on "The Influence of War on Sanitary Engineering," which will be a part of the program at a luncheon meeting. Linn H. Enslow, consultant to the War Production Board and editor of *Water Works and Sewerage*, will lead discussion.

• • •

TVA plans extension of Great Smokies Park

The Tennessee Valley Authority has announced plans to acquire 40,000 acres of North Carolina land to expand the Great Smoky Mountains National Park and to build a $3,000,000 highway through the scenic area.

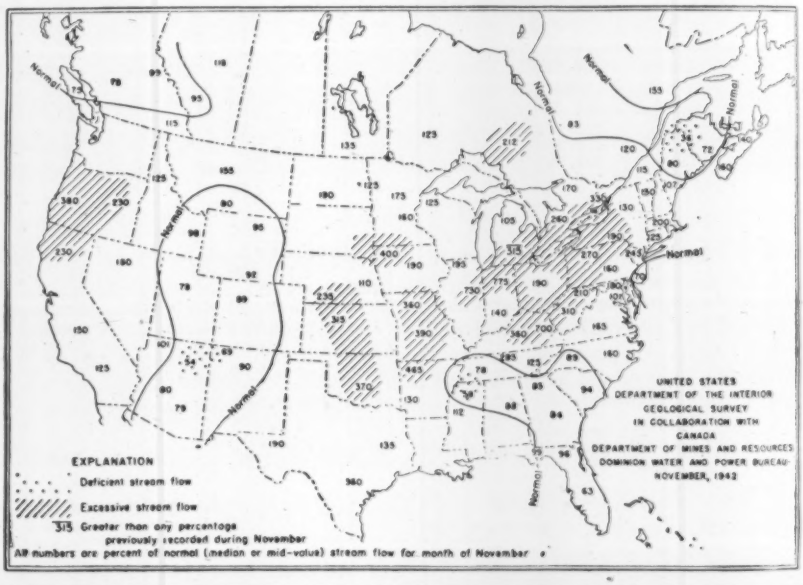
The new highway would run through the 40,000 acres, which would be purchased by TVA and turned over to the National Park Service for development. Construction of the highway, to replace a narrow and twisting mountain road, would afford access from North Carolina to Fontana Dam.

November stream flow generally above normal in U. S. and Canada

Stream flow during November, 1942, was above normal in central Canada extending from western Alberta across Saskatchewan through southern Ontario and in Nova Scotia, and in the United States the flow was above normal except in northern Maine, Florida, northern Mississippi and in the Intermountain states. There was ample natural stream flow in major power producing areas, with conditions improving materially in Oregon and Washington where flow had approached critically low rates during October.

On Nov. 30, water storage in the United States and Canada for power, municipal and industrial use as a whole was about 180 percent of that one year ago.

This favorable condition is in marked contrast to conditions during November, 1941, when stream flow averaged only 50 percent of normal in an 18-state area covering 450,000 sq.mi. from Maine to Georgia; storage for power and municipal use was critically low.


Normal
UNITED STATES
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CANADA
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NOVEMBER, 1942
EXPLANATION
Deficient stream flow
Excessive stream flow
313 Greater than any percentage previously recorded during November
All numbers are percent of normal (median or mid-value) stream flow for month of November

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WPB cuts further into hydro-electric developments and highway work

Units of big Alcoa project, TVA affected; Blue Ridge Parkway and other National Park Service road work halted

Continuing its drive to cut down construction next year to about two-thirds of this year's program (*ENR*, Dec. 3, p. 755), the War Production Board last week announced that all work has been stopped and priorities previously issued have been revoked on parts of several power plant projects and on some highway work throughout the nation.

The hydro-electric projects affected are the power plant project at Lake Catherine, Ark., of the Aluminum Co. of America; TVA's Douglas Dam and Cherokee Dam, both in east Tennessee.

The stop order affects "the installation of two 35,000 kw. turbine generator units, three boilers and all appurtenances thereto, together with all power plant structures necessary to house this equipment" at the Lake Catherine station; and installation of two 30,000 kw. generating units at Douglas and Cherokee dams. Two units each already installed at Douglas and Cherokee are not affected.

Highway work suspended by the WPB order includes work on the Blue Ridge Parkway in Virginia and North Carolina, and the Natchez Trace Parkway in Tennessee, Alabama and Mississippi—both U. S. National Park Service projects.

Other stop work orders include a grade separation on Bird St., in Boston, Mass.; a grade separation in Pittsfield, Mass., and reinforced concrete roadway and overpass at Kiethville, La.

The Parker plant is the twenty-ninth hydro-electric development placed in operation by the Bureau of Reclamation in its 40 years of construction work.

42 road jobs cut

Recent WPB orders have closed down 42 highway projects.

The WPB order not only revokes the preference rating issued in connection with these projects but specifically directs that the construction thereof be stopped immediately. Some of the projects cancelled had not been started while others had been slowed down due to material shortages, according to the American Road Builders Association. Road projects stopped included roads in Ohio, Massachusetts, Delaware, Vermont, Nebraska, Maine, South Dakota, Colorado, Illinois, Arkansas, Washington, Kentucky, Iowa, New Mexico, Vermont, Connecticut, California, and Oklahoma.

Some Coulee work continues

A limited amount of construction work at Grand Coulee Dam, previously stopped may be continued under a WPB order.

Paving of a railroad fill and construction of certain access roads, costing not more than $100,000, is permitted. In addition, permission is granted for any other work on the project that is necessary for health or safety or to avoid undue damage or deterioration of materials at the site.

The WPB confirmed its previously issued revocation of preference rating for installation of hydro generating units Nos. 7, 8 and 9 at the dam.

Construction work on Norfolk Dam in Arkansas will proceed as an essential war job, according to Donald Nelson, WPB chairman.

Meanwhile, the Bureau of Reclamation announced that its Parker Dam plant in California-Arizona on the Colorado River, has just started generating power. Two big 30,000 kw. generators at the plant have undergone test runs and are in commercial operation. Another generator of the same size, now nearly completely installed, is scheduled to start producing power later in the month and a fourth is due to be ready in May.

WLB refuses part in city-employee disputes

Municipal employees do not come within the jurisdiction of the National War Labor Board, the board decided last week.

Reversing a recommendation of one of its panels that it assume jurisdiction over a dispute between the City of Newark, N. J., and city employees, WLB decided it has no voice in the case, or in two similar cases before it involving New York transit employees and Omaha utility workers.

Since the board has already yielded jurisdiction over voluntary pay increases of municipal workers to the cities themselves, the present decision leaves the whole field of municipal labor relation independent of WLB.

Award contracts on big southern water job

Rushing preparations for the construction of additional water supply facilities for Camp Peary—big Naval Construction Battalion training center in Virginia—and to create a reserve water supply for military bases and cities of the lower Virginia Peninsula, the Regional FWA office at Richmond, Va., last week announced award of two contracts on the job.

The contracts were for construction of two impounding dams, one across Queen Creek and the other across the Chickahominy River, that will create reservoirs with a total capacity of more than four billion gallons.

Kenneth Markwell, FWA regional director, said that Michael Pontarelli & Sons of Chicago were given a contract on a cost-plus-fixed-fee contract to build the dam across Queen Creek, at an estimated cost of $392,230. The Boney Construction Co. of Norfolk received the second contract on a similar basis, for an estimated cost of $181,111.

• • •

Ohio to use paper sticker in lieu of license tags

A paper sticker, 5⅝ in. wide and 2 in. deep, fixed on the windshield of automobiles, will serve as 1943 license tags on Ohio cars and trucks.

Red stickers will be printed for use on passenger cars and yellow stickers for trucks. Present license plates on all automotive vehicles and trailers must be kept on the vehicles throughout the next year. Only one sticker will be issued to be affixed to the windshield of each individual car or truck.

FPHA appoints new technical division head

Gilbert L. Rodier, former director of war housing in metropolitan Washington, has been named acting director of the technical division of the Federal Public Housing Authority, succeeding A. C. Shire, who resigned recently to accept a post with the Board of Economic Warfare.

A native of Washington, D. C., Mr. Rodier is an architectural graduate of George Washington University, and had been engaged in private architectural practice since 1906.

Approve Dallas levee repair work funds

The Commissioners Court of Dallas, Tex., recently approved expenditures of $17,958 for the repair of levees along the Trinity River in the southern part of the county, to protect thousands of acres of land and some miles of county roads.

The court approved the issuance of bonds, to be paid for by a district ad valorem tax. The Commissioners Court of adjoining Ellis County has approved the expenditure of $57,041 for similar work.

Pump delivers concrete for Dubuque bridge deck

CONCRETE FOR THE DECK of the Iowa approach of the highway bridge under construction across the Mississippi River at Dubuque, Iowa, was delivered by a concrete pump machine located at ground level. Rapid and economical construction with a small crew resulted.

The approach, which crosses 18 railroad tracks, is 1,460 ft. long and consists of 17 continuous plate girder spans varying in length from 44 to 187 ft. Where it joins the main river crossing the deck is about 50 ft. above ground level. A 24-ft. roadway, a 5-ft. sidewalk, and a 2-ft. safety walk are provided. The 8-in. thick deck is reinforced in the transverse direction by two layers of $\frac{5}{8}$-in. round bars on $5\frac{1}{2}$-in. centers and longitudinally by $\frac{5}{8}$-in. bars on about a 1-ft. spacing 2 in. from the under side and by $\frac{1}{2}$-in. bars on about a 9-in. spacing near the surface.

Placing starts at one end

Placing of the concrete started at the extreme west end and advanced eastward. The concrete was supplied at the rate of about 20 cu. yd. per hour by the 4-bag mixer shown in an accompanying photograph. The mixer was used at three different locations, and at each location concrete was pumped about 250 ft. each way by a single-chamber pump through a single 6-in. dia. pipe. At the last location the pump not only had to move the concrete 250 ft. horizontally but had to lift it 60 ft. vertically. A 1:2:$3\frac{1}{2}$ mix requiring $7\frac{1}{4}$ sacks of cement and 5 gal. of water per cu. yd. was used. To move the mixer forward required but one day's work for a 10-man crew. Thus, once concreting started only two days were lost in moving the plant forward.

The full width of the roadway was paved in one operation and the sidewalk later with a small mixer operating on the completed portion of the deck. It was unnecessary to pave the safety walk as it was of steel construction.

Plywood forms used

Forms for the concrete deck consisted of $\frac{3}{4}$-in. thick plywood over 2x6-in. transverse joists on 16-in. centers spanning between the floor stringers, which were on 7-ft. centers. The joists were supported by 2x10-in. longitudinal timbers supported by wedges on the lower flange of the stringers. Sufficient materials were available for constructing the forms for 1,100 ft. of the roadway. The forms were left in place seven days and they were stripped by workmen on a swinging scaffold supported from the handrails of the bridge by four sets of blocks and falls.

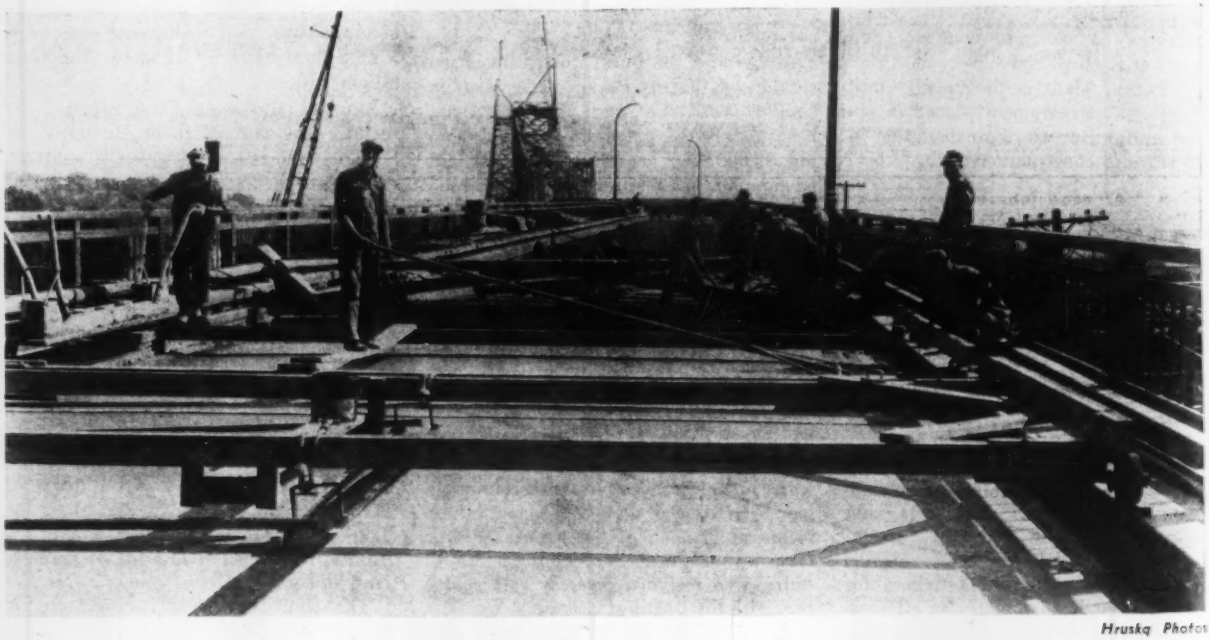
In paving the roadway a 20-man crew, including the foreman, timekeeper and superintendent, worked one 10-hr. shift and on a good day concrete was placed for as much as 100 ft. of the deck. The concrete placing procedure was as follows: After the concrete had been vibrated in place with a single pneumatic vibrator, it was smoothed by a transverse hand screed, checked by a 10-ft. longitudinal straight edge, floated by a 12-in. wide longitudinal bull float handled by two workmen, and belted with a 15-in. wide belt handled by two workmen.

Integral center stripe required

Construction of an 8-in. wide integral marker along the centerline of the roadway was necessary. It was constructed about one hour after the concrete was placed by rubbing into the top $\frac{1}{4}$ in. of the 8-in. width magnetic iron oxide at the rate of $2\frac{1}{2}$ lb. per 100 ft. How two 10-ft. long steel angles were used to great advantage to confine this work to the desired 8-in. width is shown by an accompanying photograph.

Curing of the completed concrete roadway was by addition of a thin transparent sealing membrane. This surfacing was added after the center stripe had been colored and about 2 hr. after placing the concrete.

The only expansion joints in the deck are those corresponding with those in the



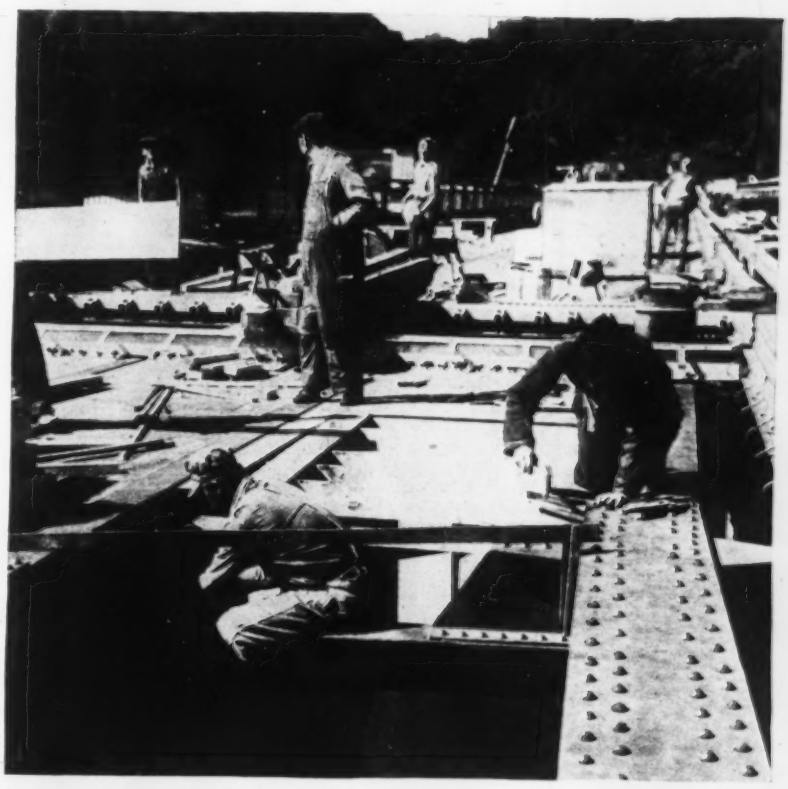
Hruska Photos

Concrete for the deck of the bridge approach is delivered by a 6-in. pipe. Placing equipment shown includes a pneumatic vibrator, transverse screed, longitudinal 12-in. bull float and a 10-ft. long straight edge. Two steel angles are used to confine carbon black oxide to the upper ¼-in. of the 8-in. center stripe. Construction of the continuous, three-span trusses for the main channel is shown in the center background.

steel girders, which means that in some places they were as much as 530 ft. apart.

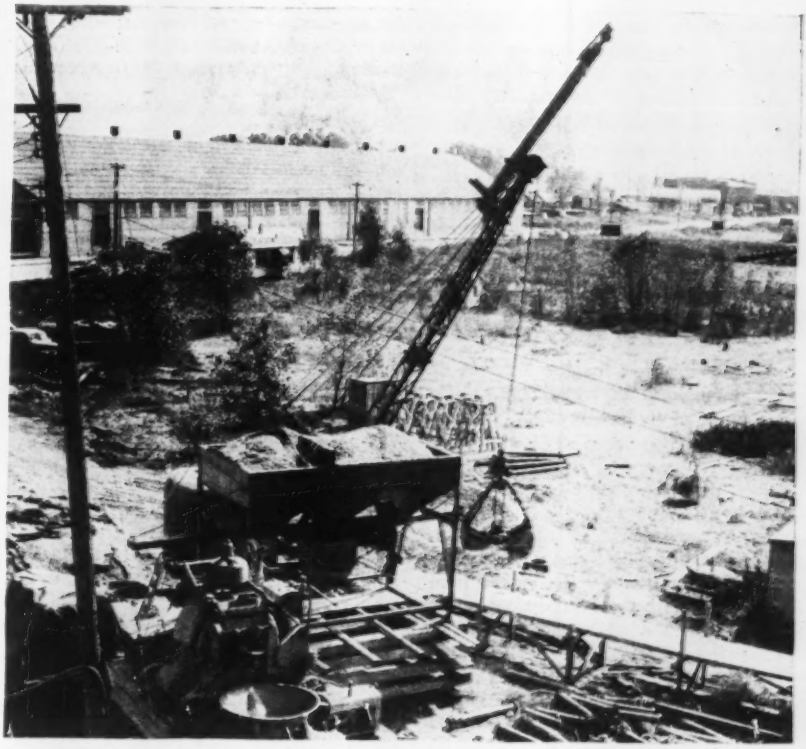
For the concrete deck and walk of the Iowa approach 890 cu.yd. of concrete and 118 tons of steel were required. Paving the approach required six weeks, including a week lost due to slow material deliveries.

Melberg & Taylor, Cedar Rapids and Decorah, Iowa, with C. B. Taylor, superintendent, did the work for Bethlehem Steel Co., the general contractor for the superstructure work. The latter organization, which is represented on the job by W. W. Oskin, resident engineer, supplied the steel and the paving contractor all other materials and the labor and equipment. The bridge is being built by the City of Dubuque Bridge Commission at a cost of $3,500,000. Howard, Needles, Tammen & Bergendoff, Kansas City, with Ivan P. Hanson, resident engineer, are the consulting engineers for the crossing, which is to be opened early in 1943.



Forms for the concrete deck consisted of ¾-in. thick plywood over 2x6 in. joists on 16-in. centers, supported by 2x10-in. longitudinal timbers carried on the lower flange of the steel stringers. Wedges of the type at left proved very satisfactory.

Concrete was delivered at the rate of 20 cu. yds. per hour. It was spread by hand and vibrated in place. The deck was constructed in sections, according to a predetermined sequence.



Concrete plant consisted of a 4-bag mixer driven by a 35-hp. gasoline engine, and it was equipped with a single-chamber pump. Concrete was pumped 250 ft. each way from the mixer through a 6-in. dia. pipe. To move the plant forward required but one day's labor for a 10-man crew.

Press Assn. Photo

Pipe moves out for "big inch" oil line

Coupled with an announcement last week from the Office of the War Production Board that there has been no delay in construction of a pipeline from Texas oil fields to the Eastern seaboard because of deliveries of pipe, was the release of this photograph showing a trainload of the 24-in. steel pipe en route to a site along the pipeline's route.

The pipe shown above, part of a 20-mile section, is being delivered for work on the second section of the line, extending from Norris City, Ill., to the Philadelphia, Pa. area. Construction of the 857-mile, $60,000,000 second section began on Dec. 22, westward from Phoenixville, Pa.

Engineering features of this major project will be detailed in an article to appear in Engineering News-Record's December 31 issue.

Protest cut in Pittsburgh engineering budget

Failure to provide for the services of a bridge engineer in Pittsburgh, Pa.'s, 1943 municipal budget brought a storm of protest recently from civil engineers of the city.

Appearing before the city council immediately after the new city budget was announced, members of the Pennsylvania Society of Professional Engineers pointed out that the city has more than 150 bridges, and that highly technical knowledge is needed to insure proper care of these structures. Charles A. Finley, a former director of public works for the city, told councilmen that while there is a mechanical force of 44 men for bridge maintenance, the force includes no bridge engineer.

As submitted by Mayor Scully, the 1943 budget recommended cuts of about $230,000,000 under previous years.

Appoint Steel Institute contest committee

The American Institute of Steel Construction has announced the appointment of a five-man committee to select the prize winning designs in the Institute's students' annual bridge design competition.

The current competition has been held annually for 14 years, designs judged to be the first, second and third best being awarded prizes of $200, $100 and $50, respectively.

Jurymen are Hugh Ferriss, architect; Arthur C. Holden, architect; F. A. Burdett, consulting engineer, and Howard Myers, editor of the Architectural Forum, all of New York City; and Morris Goodkind, bridge engineer for the New Jersey state highway department. The jury will meet at headquarters of the Institute, 101 Park Ave., New York, N. Y., on Feb. 17 to make their selections.

Southern cities see water supply imperilled

Cities in the Southeastern section of the United States last week became apprehensive over continuing low water table that seemed to imperil their sources of municipal water supply.

At Miami, Fla., where officials were already worried about the backing up of salt water into the Miami canal, engineers said the city faces the possibility of losing its water supply unless there is an immediate and abnormal amount of rainfall. With the water table in the Everglades at its lowest point since the winter of 1938-39, C. Kay Davis, soil conservation engineer, predicted that an infiltration of salt water into Miami's water supply should be expected by February.

Pineville, La., unable to obtain water pipe because of a low priority rating, faced a critical fire hazard according to Mayor Rollo C. Lawrence. Mayor Lawrence said that water pumps are now kept running from 18 to 20 hours a day in order to supply the town with water and keep an adequate supply in the single 200,000 gal. reservoir and a 72,000 gal. water tank. The town's population has jumped from approximately 4,800 two years ago to an estimated 8,500 at present. The town has three new water wells ready for use and a federal grant for the extension of the water system, but cannot obtain priority ratings for pipe.

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B. C. Collier, engineer and industrialist, dies

Bryan Cheves Collier, 73, retired president and chairman of the board of the Cement Gun Co. and widely known as a civil engineer, died Dec. 15 at Allentown, Pa.

A native of Georgia, Mr. Collier graduated in civil engineering from the University of Georgia and engaged in engineering operations in New York City for nearly a quarter century. He served as field operating engineer in construction of the Broadway-Seventh Avenue subway, was field engineer in charge of operation for construction of Kensico Dam, for the New York City water supply, and later was assistant engineer for the Borough of the Bronx. As a highway construction engineer, he was in charge of the construction of the Madison Avenue bridge in New York City.

In 1913 he came to Allentown to join the Traylor interests, developing the Cement Gun Company and the Gunite process. He was successively chief engineer, general manager, vice president and president of the Cement Gun Corp., and at the time of his retirement nearly three years ago was chairman of the board.

This week on the scrap front

The nation needs scrap metal—17,000,000 net tons of it—by Dec. 31 of this year to enable the steel mills to meet the heavy demands of a rapidly expanding war industry. To get this scrap from its resting place in junk yards, contractors' lots and city storage yards, to the mills, is a job which the engineering and construction industry can do well. Here are some of the developments of the past week in this drive:

Iron and steel scrap will be needed in increasing quantities, and the requirements for next year's production will entail a deeper penetration of the dormant scrap resources of industry, farms, and heavier houshold metals, Lessing J. Rosenwald, director of the WPB Conservation Division, and H. G. Batcheller, director of the Steel Division, emphasized in a joint statement last week.

Despite statements that steel mills are "resting easy," and that scrap dealers are overstocked, the fact remains that most of the non-recurring scrap has gone into armament shipped abroad which will never come back, the officials declared.

Current mill inventories of scrap are not large enough to satisfy any probable future demands and the situation can easily become acute again in less than a week, they added.

★ ★ ★

As evidence of what the federal government itself has done toward the scrap campaign, the National Parts Service reported that it had collected 6,473,850 lb. of scrap metal. The greatest part of the material—6,464,620 lb.—was iron and steel. In addition, 7,802 lb. of copper, 4,988 lb. of lead, 4,273 lb. of brass, 1,092 lb. of aluminum, and 1,075 lb. of tin were found. Only 5 lb. of nickel was secured.

Items in the collection included an old bridge from Platt National Park; 200 lb. of old horseshoes from Fort Laramie, Wyo.; an old trench digger of French make from the Grand Canyon; the first power-driven washing machine taken into Mount Rainier National Park; radio towers from the Statue of Liberty on Bedloe's Island, N. Y., and historic cannon and other materials from many points.

★ ★ ★

In an effort to conserve vital and now scarce railroad materials, the Southern Railway Co. announced its plan to remove its tracks from Simmons St., in Charleston, S. C., and relocate them elsewhere for further use. The half mile of track on the street, put down nearly fifty years ago, has long been unused.

NHA housing policy control expanded

The National Housing Agency last week completed an agreement with the War Production Board that will restore to NHA much of the authority over housing policy which, in the past year, has gravitated into WPB hands.

In essence, the new agreement provides that WPB will simply make quarterly allotments of materials for use in housing, while NHA will decide into what housing the materials go. Thus the arrangement tentatively worked out last month (*ENR*, Nov. 12, p. 675) is formally confirmed.

In particular, NHA will decide the division between public and private housing. There was a time when this would have looked unfavorable for private housing, but in recent months WPB has been much more inclined than NHA to subordinate private to public housing. All housing, however, whether public or private, must be for rent rather than for sale. Only exception is that a war worker who has rented a house for four months will be allowed to buy it.

The new set-up makes no immediate change for the builder and contractor. As before, the private builder obtains priorities through the offices of the Federal Housing Administration, an NHA unit, while the contractor on a public housing project works through the owner, the Federal Public Housing Authority, another NHA unit. However, much of the delay that has dogged housing projects may be eliminated; These delays frequently arose from disagreement between NHA and WPB as to the propriety of a particular housing project.

The new arrangement also clears the way for introduction next year of the Controlled Materials Plan. NHA has been made a claimant agency under the plan. This means that when CMP is working, allotments of steel, copper, and aluminum, if any, will be made direct to NHA and distributed by it among house builders.

JOBS OF THE WEEK

HOUSING, Borger, Tex.
Thurman & Ostrum, Borger, has been awarded contract by Public Housing Authority, NHA, Fort Worth, Tex., housing units $500,000–$1,000,000. W. C. Townes, Amarillo, is engineer.

HOUSING, Mobile, Ala.
Mobile Housing Authority, Mobile, awarded contract to Peyton, Higgison & Hancock Co., Mobile, for general contract, site improvement, plumbing, heating, electrical work and landscaping, $1,864,142; also to Kenneth R. Giddens and J. E. Plate Construction Co., Mobile, general contract site improvement, plumbing, heating, electrical work, landscaping, 262 war apartments, 452 war apartments and 240 dormitories, $1,092,000. Platt Roberts, 404 First Natl. Bank Bldg., Annex, Mobile, are architects.

HOUSING, Wyoming
Public Housing Authority, NHA, Kansas City, Mo. received lowest bid for the construction 325 housing units, Cheyenne, Wyoming, from Mead & Mount, Denver, Colo. $1,500,000. Fisher & Fisher, Denver, are architects.

HOUSING, Virginia
Public Housing Authority, Washington, D. C. 500 units, Columbia Pike Housing, Va., from T. Calvin Owens, Washington, D. C., $1,413,000. Faulkner & Kingsbury, Washington, D. C., architects.

HOSPITAL, New York
U. S. Engineers, New York, N. Y. awarded contract Army General Hospital, Oneida Co. to John A. Johnson & Sons, Brooklyn, N. Y. Estimated cost $2,000,000.

BUILDINGS, California
U. S. Engineers, Los Angeles, Calif., received lowest bid for construction of building, San Bernardino County from James I. Barnes Construction Co., Santa Monica. Estimated cost $1,000,000.

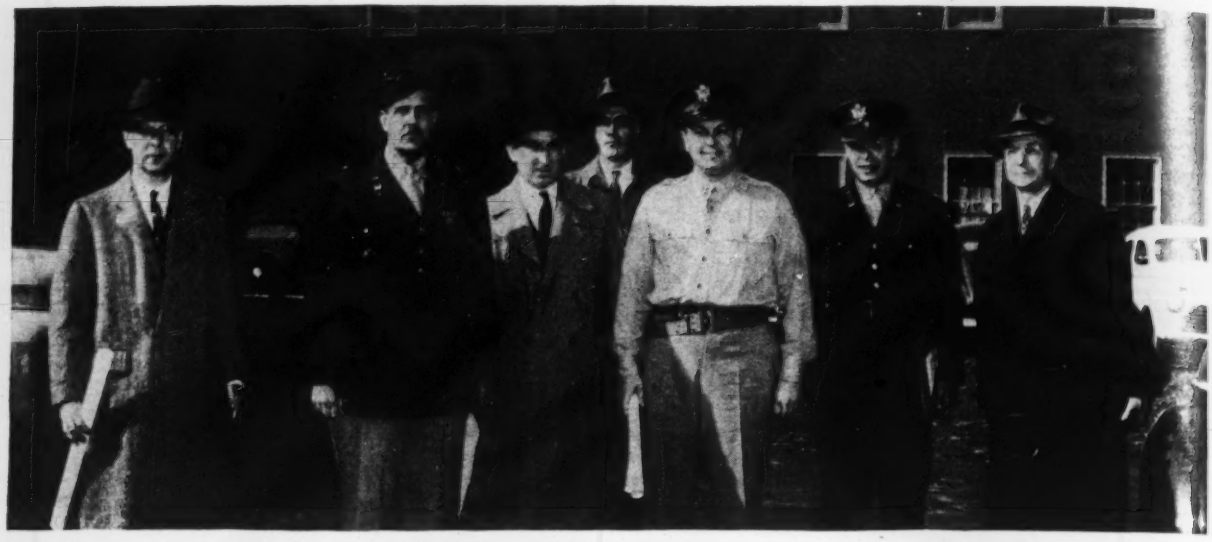
BUILDING, Tennessee
U. S. Engineers, Mobile, Ala., awarded contract for warehouse buildings in Shelby County to A. Farnell Blair, Decatur, Ga. Estimated cost $5,000,000.

MESS BUILDING, Michigan
U. S. Engineers, Detroit, Mich., awarded contract for constructing T. O. mess building in Washtenaw County to Jerome A. Utley, Detroit. Less than $1,000,000.

IMPROVEMENTS, Oklahoma
U. S. Engineers, Tulsa, awarded contract improvements, Greer Co. to Johnson-Peterson-Busboom & Rauh, Salina, Kan., paving to Trinidad Asphalt Mfg. Co., St. Louis, Mo., under $5,000,000.

PAVED RUNWAYS, etc. Virginia
U. S. Engineers, Norfolk, Va. awarded contract additional construction, paved runways, taxiways, clearing, grading, drainage, seeding etc. in Greenville County to W. H. Scott Inc. and Highway Contractor, Inc., Franklin and Norfolk, Va. $500,000–$1,000,000.

NOTE—Additional bidding and contract news on over 800 projects large and small appear in the Construction News section beginning on page 13.

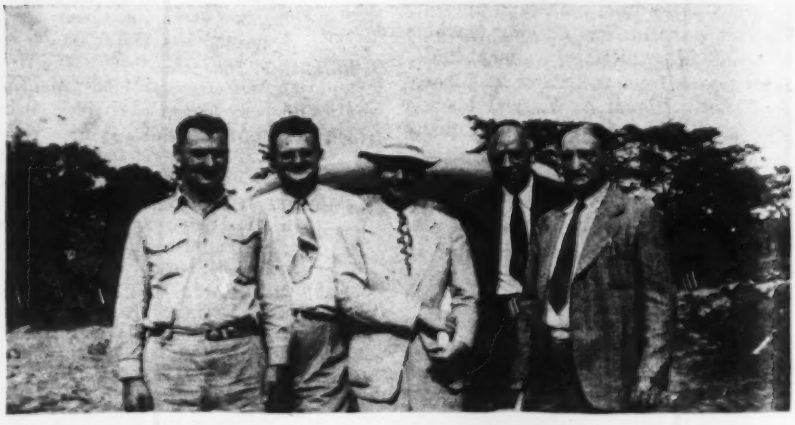


Above: Inspecting a large cantonment project under construction in New York State are, left to right: WALTER WEISKOPF, operations branch, N.Y. U.S.E.D. office; BRIG.-GEN. L. R. GROVES, Corps of Engineers; D. G. ARONBERG, project manager, Cauldwell-Wingate Co. and Poirier & McLane Corp., joint contractor; W. M. YARKER, project manager for Tuttle, Seelye, Place and Raymond, architect-engineers; MAJ. DREW C. EBERSON, area engineer; MAJ. C. K. PANISH, Corps of Engineers; and A. L. LOCKWOOD, real estate department, North Atlantic Division Engineer's office.

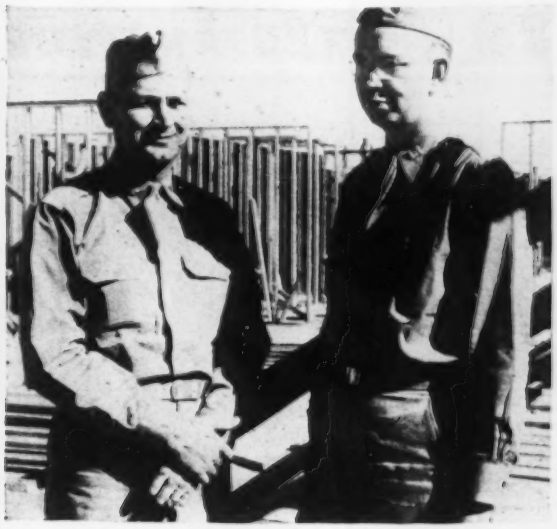
MEN AT WORK

Left: Details involved in the changing of a single-lane highway near West Charleston, W. Va., into a modern double-lane, divided highway are under discussion here by C. A. ROTHROCK (left), assistant state construction engineer for the West Virginia State Road Commission, and CHARLES H. BOGGS, who is resident engineer on the job for the same organization. Both of the men are oldtimers to highway construction work.

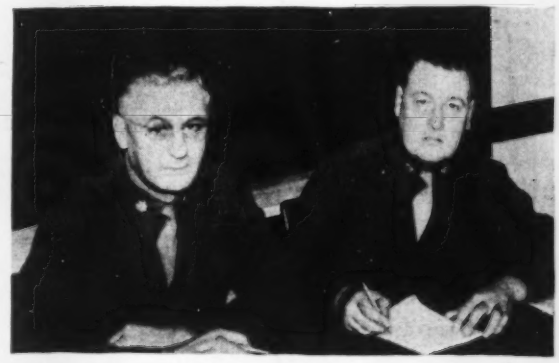
Right. Standing on the site of the Indianapolis, Ind., Water Company's Oaklandon Reservoir, these five men pause to pose for the camera. They are, left to right, C. ALLEN, resident engineer for the water company; L. S. FINCH, assistant engineer for the company; ROBERT FHILLIPE, U.S.E.D., Cincinnati, O.; C. C. CHAMBERS, consulting engineer, Dayton, O., and W. C. MABEE, chief engineer for the water company. When completed, the new reservoir will be a lake about seven miles long and one-half mile wide, to serve domestic and industrial needs of the city.



Above: LT. COL. T. G. HAZENBUSH (left) and CAPT. C. E. SAYERS (right), both of the South Pacific Division engineer office, conferred recently with CAPT. JOHN S. DETLIE, Seattle (Wash.) Engineer District camouflage officer.

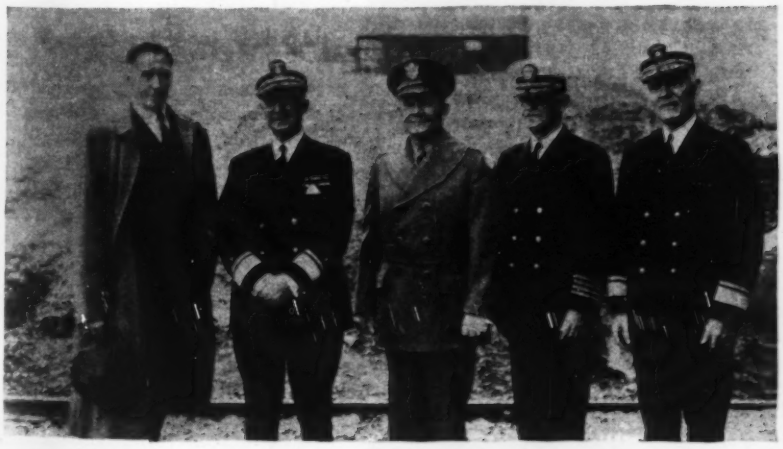


Above: MAJ. ARTHUR C. NAUMAN, Spokane (Wash.) area engineer, and FIRST LT. ERNEST J. SIMONS Jr., his assistant, are shown comparing notes on the site of an Army project "somewhere in the Pacific Northeast".



Above: MAJ. W. M. ALSIN (left), area engineer, and CAPT. F. W. ASHTON, assistant area engineer, for the U. S. Engineers at the Quad Cities Tank Arsenal and Ordnance Steel foundry, Bettendorf, Iowa, check over important details of their work. Both men were commissioned recently. Major Alsin has worked with the Portland Cement Association and Captain Ashton as a civilian with the U. S. Engineers at Rock Island.

Right: At the Indianapolis (Ind.) ordnance plant C. L. COWAN (left) is the resident engineer for the U. S. Engineers, and MAJ. ANDREW L. FABENS, area engineer. They are here discussing means of obtaining even greater speed on a job that is already in super-high gear — far ahead of ordinary construction schedules for work of its type.



Left: After ceremonies marking the presentation of the joint Army-Navy "E" award for excellence to the plant and workers of the Maxon Construction Co., Inc., officials got together for a tour of the war job just completed. Left to right, they are: G. W. MAXON, construction firm president; REAR ADMIRAL JOHN DOWNES, Commandant, Ninth Naval District; COL. MARTIN RAY, Commanding Officer, Third Security District; CAPT. E. G. OBERLIN, (U.S.N.R.), inspector of ordnance in charge; and REAR ADMIRAL H. G. TAYLOR, superintendent of Civil Engineers, Bureau of Yards and Docks, U.S.N.

MEN AND JOBS

Fred O. Condon, of Moncton, N. B., has been retired as chief engineer of the Atlantic region of the Canadian National Railways. He had been on leave of absence due to ill health, and had been expected to return to duty. Mr. Condon, who is 64, started his engineering career almost half a century ago as a messenger in the office of the chief engineer at Moncton.

Maj. George L. Barkhurst, area engineer for the Corps of Engineers at Everett, Wash., has been ordered to report to Miami, Fla., for temporary duty.

Ernest F. Schimpeler, Louisville, Ky., city construction engineer for eight years, has resigned to join a construction firm engaged in war work.

First Lieut. Joseph A. Hester, Jr., of Clanton, Ala., former engineer for the Alabama Highway Department, recently received a diploma for satisfactory completion of the Troop Officer Replacement course at the Army's Chemical Warfare center.

Charles A. Newberry, chief of the surveying party for the city of Oklahoma City, and an employee of the city's engineering department, for the past 19 months, has enlisted in the Seabees, Naval Construction organization.

Frank N. Barker, chief of the Illinois State Highway Research Bureau, has been appointed executive secretary of the State Highway Traffic Advisory Committee. He succeeds **Harry H. Harrison,** who is on leave for army service.

Thomas B. Wilson has been appointed office engineer in the right-of-way division of the North Carolina State Highway and Public Works Commission at Raleigh, succeeding **W. H. Webb, Jr.,** who resigned recently to enter the Army.

Capt. Augustus P. Cooper, former assistant post engineer at Camp Atterbury, Indiana, has been transferred to Columbus, Ohio.

Ray E. Mackenzie, formerly at the Portland, Ore., division office of the U. S. Engineers, was recently transferred to the San Francisco office as senior engineer.

Staff changes in the engineering department of the Northern and Southern Ontario Districts of Canadian National Railways have been announced. They include: **L. I. Stone,** formerly division engineer, at Toronto Terminals, appointed to the new post of assistant district engineer, Northern Ontario, headquarters at North Bay; **S. B. Wass,** division engineer at St. Thomas, Ont., has been appointed to a similar post at the Toronto terminals; **D. E. Carriere,** succeeding Mr. Wass at St. Thomas; **F. C. Mattocks,** formerly division engineer at Hornpayne, succeeds Mr. Carriere as division engineer at Allandale, Ont., and **A. V. Johnston,** appointed division engineer at Hornpayne.

D. B. Gumensky, recently a designing engineer with the Morrison-Knudsen Co. in Honolulu, T. H., has accepted appointment to the designing staff of the Bechtel-McCone-Parsons Corp. at San Francisco.

Col. Arthur J. Widmer, president of the Widmer Engineering Co. of St. Louis has announced the appointment of **Ralph G. Macy** (right) as first vice president of the company. Mr. Macy, formerly of Salt Lake City, Utah, is a nationally known specialist in the organization and construction of public utility systems and in public utility valuation. He was at one time chief engineer for the board of public utility commissioners of New Jersey.

A. L. Meisel, a civil engineer and city manager of Williamsburg, Va., has announced his retirement from his post to enter private employment.

Capt. Robert M. Condra, area engineer at Asheville, N. C., for the construction of a hospital there, has been promoted to the rank of major and transferred to Atlanta, Ga., as executive assistant to the Atlanta district engineer.

Alvin Lee, formerly superintendent of bridge construction in Missouri, is now superintendent of structural and reinforcing steel on the Vigo ordnance plant for the Esslinger-Misch Co., of Detroit, Mich.

Samuel F. Stephens, formerly of the North Carolina Highway and Public Works Commission, has assumed new duties as successor to **Warwick C. Thomas,** who recently resigned as senior engineer and office assistant in the Virginia Department of Highways. Mr. Thomas became associate engineer with the Civil Aeronautics Administration.

Samuel C. Hadden, chairman of the Indiana State Highway Commission, has announced appointment of **Henry Schulz** of the Columbus subdistrict to succeed **Jerome Dustin** as acting subdistrict engineer. Mr. Dustin will be retained by the commission in another capacity.

H. C. Merritt has been named to municipal board at Clarksville, Tenn., succeeding **W. D. Hudson,** who resigned to give his full time to his duties as public utilities commissioner.

Col. A. E. Archman is engineer in charge of a dominion government housing project at Lakeburn, N. B.

Bruce J. Downey, civil engineer and project manager for the real estate branch of the Engineer Office of the Fourth Corps Area, stationed at Oxford, N. C., has been transferred to the Atlanta office for reassignment. **J. E. Rawls,** of Enterprise, Ala., succeeds Mr. Downey at Oxford.

Col. Samuel D. Sturgis, Jr., engineer in charge of the Vicksburg, Miss. engineer district since 1940, has been ordered to report for troop duty soon.

Stanley Sweeney, who has been connected with the Pensacola, Fla., city engineer's office for many years, has been named acting city engineer in the absence of **Oliver J. Semmes, Jr.,** now a lieutenant in the Corps of Engineers.

Charles B. Williams, superintendent of water and light for the city of Lexington, N. C., for the past eight years, has resigned to become connected with the Fairchild Aircraft Corp. at Burlington, N. C. He is succeeded at Lexington by **Monte Beck.**

Lt. John P. Soult, army engineer in charge of construction at an air base in Nebraska, has been promoted to captain and will be placed in charge of another project. **Lt. Norman V. Gomes,** the assistant engineer on the original project, has been appointed post engineer.

County Engineer **Glenn Gibson,** of Fort Myers, Fla., has resigned his post to accept a commission as a first lieutenant with the Corps of Engineers.

Maj. Carl A. Anderson has been assigned by the Corps of Engineers as area engineer of the Upper Columbia River area at Wenatchee, Wash. **Capt. Charles A. Jackson, Jr.,** former area engineer, will remain as Major Anderson's executive assistant.

BRIEF NEWS

FOR THE first time in its history, the James River Bridge system at Norfolk, Va., has declared a dividend on its common stock. The dividend, $1 on each share of each class of stock, will be payable January 1. The system was organized as the James River Bridge Corp., and spent between seven and eight million dollars in erecting and acquiring bridges and highways near Newport News. Greatly increased war traffic accounts for the financial improvement.

CONVICT workmen began construction Dec. 7 at San Quentin Prison, California, on an initial contract for 72 assault boats for use by American troops. Four or five boats are expected to be completed daily. The vessels will be all wood, metal fastened flat bottom types, 14 ft. in length, and may also be used as pontoons for military bridges.

PRELIMINARY steps have been taken to organize a Canadian National Home Builders' Association, with chapters already formed in Toronto, Hamilton and Ottawa. M. M. Walker of the Toronto office of the Canadian Lumbermen's Association is acting-secretary. The proposed association will attempt to secure priorities for materials for speculative builders on the same basis as Wartime Housing Limited—government housing corporation; to press for the extension of the National Housing Act to cover low cost housing up to costs of $3,500; and to take steps to obtain recognition of the rights of private enterprise in any post war building projects.

THERE are now more than 1,300 employees of the Pennsylvania Department of Highways in military service, including six women who have joined the WAACS. According to highway department figures, 1,200 of the total have entered the armed services since December of 1941.

THE MICHIGAN State Board of Registration for Architects, Engineers and Land Surveyors will hold its next examination for architects at the University of Detroit on Dec. 28–29–30; for engineers on Dec. 30, and for land surveyors on Dec. 29–30.

MODERNIZATION of the older cell blocks at the Oregon state penitentiary, at Salem, and extension of the walls to provide more yard space, should be first improvements undertaken at the prison whenever funds become available," the prison board of control decided in a recent action.

Municipal water supply, frontier style

Wartime restrictions on pipe, pumping machinery and other equipment for water supply systems that plague many a city official in the United States, are of almost no concern to the residents of Whitehorse, Yukon Territory, who find their 2-"horsepower" distribution system completely effective.

Making several daily trips to a nearby stream to replenish the supply this one-man private water utility, has for equipment two horses and a wagon that carries a 500-gal. tank, and does a thriving business. The water is sold in 5 gal. cans, which are filled from the tank on the wagon. There is no sliding rate of charges, the price per can being fixed at six cents.

Water treatment census made by Health Service

More than half of the people in the continental United States are served with water that receives treatment, according to a survey recently completed by the U. S. Public Health Service. An average per capita consumption of 119 gallons is indicated.

The data reveal that 74,300,000 people —56 percent of the total population as recorded in the 1940 census—are supplied from community water treatment facilities. Raw water supplies are drawn for treatment from surface sources at 2,618, or 49 percent of the total number of plants for which sources are known; 2,486, or 46 percent, are supplied from ground sources; and 262, or 5 percent, from combinations of both surface and ground sources.

Water treatment plants of all types considered total 5,372, of which, on the basis of known cases, 69 percent are municipally owned and 31 percent are privately owned.

The data, tabulated by states and prepared for general distribution, were released by the U. S. Public Health Service office at Cincinnati, Ohio.

P. T. Cox Construction Co., Inc., and Spearin Preston and Burrows, joint contractors on an $8,000,000 construction job for the Navy in Rhode Island have been awarded an Army-Navy "E" for outstanding work under difficult conditions.

New York loses suit to control Niagara flow

The New York State Court of Appeals, in a unanimous decision rendered on Dec. 10, rejected the contention of the state's Water Power and Control Commission that the legislative grants under which the Niagara Falls Power Co. diverts water from the Niagara River for power purposes were unconstitutional. However, in thus sustaining the findings of the lower courts through which the case had come, the judges of the Court of Appeals said that since the statute under which the action was brought excluded the defendants from its coverage, and because the state itself was not a party to the suit, they were making "no determination as to the particular nature and extent of the defendant's rights and privileges, or as to the effect thereon of the state's reserved right to control, regulate or license, through appropriate legislation, the diversion of water from the Niagara River near Niagara Falls." This is taken to indicate that the state by legislative act can require the power company to pay a license fee for use of the 15,100 cfs. that it uses without payment of a fee to the state.

TRAFFIC averages compiled from 22 automatic counting stations on Michigan state trunk highways during October reveal that traffic decreased 27.5 percent compared to October, 1941, according to the state highway department.

OBITUARY

Frank Putnam Gowan, 56, formerly city engineer of Laguna Beach, Cal., died recently. During his term as city engineer from 1930 to 1933, the Cliffs Improvement District and the Arch Beach sewer system were completed. At his death Mr. Gowan was a government engineer stationed at Phoenix, Ariz.

George Hume Simpson, 94, civil engineer of Pittsburgh, Pa., died there Dec. 11. Educated in England, Mr. Simpson had participated in the construction of Schenley Oval in Pittsburgh and many other projects.

Hart Cooke, 71, senior engineer for the American Locomotive Co. at Auburn, N. Y., died Dec. 14. He had been serving recently as an instructor to naval personnel stationed at Cornell University.

David Burns Hyer, 67, architect and engineer of Charleston, S. C., died Dec. 11. In his early career Mr. Hyer had been employed as a civil engineer for many Southern railways, but in later years practiced architecture, maintaining an office in Charleston.

Roy Moore, 69, consulting engineer of Oakland, Cal., died there Dec. 14.

James Austin, 87, retired railroad engineer, died Dec. 11 at St. Louis, Mo. Mr. Austin oversaw construction of the first tracks of the St. Louis-San Francisco Railway, and later built numerous other important links of the Frisco System and the Missouri-Pacific lines. He retired about 20 years ago.

John C. White, 49, civil engineer and a member of the Westchester County (N. Y.) Tax Commission, died at Hastings-On-Hudson Dec. 16. Mr. White, a veteran of the first World War, was at one time village engineer for Hastings-On-Hudson.

Burton C. Fiske, 79, president of the Fiske-Carter Construction Co., of Worcester, Mass., died at Worcester Dec. 11.

Joseph C. Greene, 44, foreman of the Cambridge, Mass., street department since 1934, died at Cambridge Dec. 13.

James Alexander Hines, 78, retired contractor of Wilmington and Winston-Salem, N. C., died at Winston-Salem Dec. 16.

L. L. Newton, 42, building contractor of Gainesville, Fla., died Dec. 12.

James Wilson Thomas, retired contractor of Lexington, Ky., died there Dec. 14.

Norwegian engineers form unit in Canada

Indicative of the influx of European engineers into Canada in connection with war work is the formation of a Canadian branch of the Norwegian Engineers' Society.

Members of the group are largely recruited from Norwegians in training at "Little Norway" in Toronto, central training camp for Norwegian armed forces in Canada. All members are graduates of the Norwegian Technical University at Trondheim.

Thor Wold, director of Smith & Stone, electrical manufacturers of Georgetown, Ontario, is president-elect of the branch.

Approve garbage disposal facility addition

Presidential approval of a federal allotment of $61,400 to provide additional garbage disposal facilities in Elizabeth City County, Virginia, has been announced by Kenneth Markwell, FWA regional director.

The project provides for the purchase of two sites of approximately 15 acres each in the vicinity of Hampton and Phoebus, for garbage disposal by the land-fill method; purchase of two bulldozers, two gasoline shovels and 15 garbage trucks, and the construction of two storage and repair shops and necessary access roads.

CONTRACTS AND CAPITAL

ENGINEERING construction volume for the short week due to the early closing for the Christmas Holiday totals $33,377,000. This is the lowest weekly volume reported during 1942. It compares with $75,539,000 recorded for the full preceding week, and is 34 percent below the total for the corresponding short week in 1941.

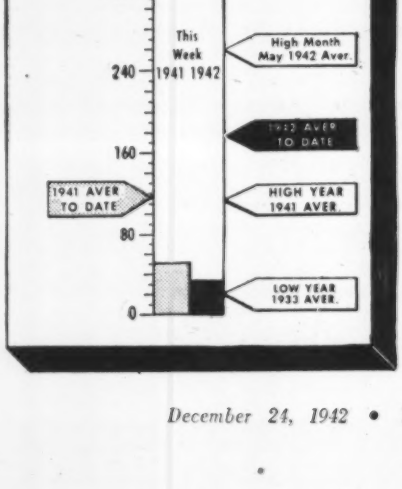
Federal work is 8 percent below the week last year, and this decline coupled with the 91 percent drop in state and municipal work, brings public construction 26 percent under its last year's mark. Private work, accounting for $513,000 in the current week, is 91 percent lower than a year ago.

Engineering construction volume for 1942 to date, $9,229,534,000, is 57 percent above the total for the 52 weeks of 1941. Private volume for the 1942 52-week period, $552,838,000, is 53 percent below last year, but public construction, $8,676,696,000, is 85 percent higher than a year ago as a result of the 133 percent gain in federally financed construction.

In the classified construction groups, gains over the corresponding 1941 week are in waterworks and unclassified construction. Unclassified construction registers the only gain over the preceding week.

New capital for construction purposes for the week totals $5,062,000, entirely state and municipal bond sales. This compares with $1,570,404,000 reported for the week last year.

New construction financing for the year to date, $10,219,111,000, is 29 percent higher than the $7,895,121,000 volume for the year 1941.



CONTRACTS

(Thousands of dollars)

	Week Ending Dec. 25 1941	Dec. 17 1942	Dec. 24 1942
Federal	$35,018	$69,786	$32,651
State & Municipal	9,169	2,668	813
Total public	$44,187	$72,454	$32,864
Total private	5,983	3,085	513
TOTALS	$50,170	$75,539	$33,377
Cumulative 1942 (52 weeks)			$9,229,534
1941 (52 weeks)			$5,868,639

Note: Minimum size projects included are: Waterworks and waterways projects, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

NEW PRODUCTIVE CAPITAL

	Cumulative 1941 52 weeks	1942 52 weeks
NON-FEDERAL	$1,380,761	$639,927
Corp. Securities	358,817	182,729
State & Mun.	439,203	217,041
U.S.H.A. loans	30,399	.....
R.E.A. loans	100,500	.....
R.F.C. loans	288,842	157,455
Fed. Aid—Highways	163,000	82,700
FEDERAL	6,514,368	9,579,186
TOTAL CAPITAL	$7,895,129	$10,219,111

ENR INDEX NUMBERS

Index Base = 100

		▲ 1913	1926
Construction Cost	Dec. '42	283.69	136.37
Building Cost	Dec. '42	226.63	122.51
Volume	Nov. '42	462	202

FHA MORTGAGES

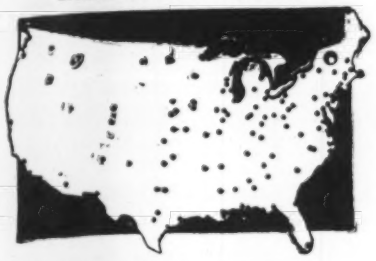
	Week Ending Dec. 20 1941	Dec. 12 1942	Dec. 19 1942
Selected for appraisal			
Title II	$14,000	$3,878	$ *
Title VI	$3,238	$5,744	$ *

*Subject to revision.

CONSTRUCTION REPORTS

Compiled by Business News Department—Engineering News-Record, 330 W. 42nd St., New York
ELSIE EAVES, Manager *SCOTT McLEOD, Statistician*
(Daily service also available—Write for details)

Location of ENR Correspondents



Symbols and Abbreviations Include

† Federal Government
★ Project of $500,000 or over
ENR Engineering News-Record
CD Engineering News-Record Construction Daily
A-E-M Architect — Engineer-Management type of contract.

Projects—By Size

Construction projects here reported cover the United States and Canada, are of these minimum sizes or larger; water supply, earthwork, waterworks, $15,000; other public works, $25,000; industrial buildings, $40,000; other buildings, $150,000.

Classes of Construction

(Named in order of Listing)

Water Supply — Unclassified
Sewers, Waste Disposal — Latin America
Bridges, Grade Cross'gs — Public Buildings
Streets & Roads — Commercial Buildings
Earthwork, Waterways — Industrial Buildings

Stages Reported

PROPOSED: (except Streets & Roads):

BIDS ASKED (new announcements only. For full calendar, see also preceding issues of ENR);

LOW BIDDERS: On jobs below $500,000 value all low bidder news will be the final reports published on the projects involved except where award is not made to the low bidder. In this case, a supplementary contract award report will be published.

CONTRACTS AWARDED: Except awards to low bidders previously reported in low bidder stage.

Dates shown are of issue in which last previous report was published.

Note: To comply with censorship requirements, addresses on some reports are being generalized. Data which would reveal the purpose of the improvements and the size are withheld. The name of contractor and general area are reported.

WATER SUPPLY

PROPOSED WORK

†Ill., Seneca—Federal Works Agency, 20 N. Wacker Dr., Chicago, WW sys. **$33,000.** Austin Eng. Co., Peoria, engr.

†N. M., Albuquerque—C. E. Wells, city mgr., water facility addns. $300,000. **FWA.** E. O. Betts, city engr.

Tex., Houston—Harris County Fresh Water & Supply Dist. 14, water distr. facilities. Over $15,000.

LOW BIDDERS

†California—U. S. Eng., 751 S. Figueroa St., Los Angeles, Dec. 10, water distr. and sewer collection sys., No. 934, Riverside Co., from E. Goral, 416 W. 8 St., Los Angeles, and W. S. Roeder, 2759 11 St., Riverside, over **$100,000.**

†Conn., New Britain—City, P. Wks., Dpt., City Hall, Dec. 15, water sys. expan., Conn 6165, from New Britain Trucking Co., 50 Chestnut St., **$14,905. FWA.** CD 12/8—ENR 12/10.

†Md., Hyattsville — Washington Suburban Sanitary Comn., Hamilton St., Md. 13-175, c.i. watermains, from W. G. Fritz Co., Inc., 69 Main St., West Orange, N. J. **$83,773.** Bids 12/16. CD 12/1—ENR 12/3.

†Wash., Milton—Kay Kirkland, town clk., Town Hall, Dec. 10, reservoir and water distr. sys., Pierce Co., from Neukirch Bros., 745 Bellevue Ave. N., Seattle, **$24,254.** Est. $24,500. CD 11/30—ENR 12/3.

CONTRACTS AWARDED

†Florida—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, water distr. and sewage collection sys., Inv. NEG-JAX-43-391, Collier Co., to Cleary Bros. Constr. Co., Georgia Ave., West Palm Beach, less than **$50,000.**

†Georgia—U. S. Eng., Conley, pump. sta. (pump house), Clayton Co., to Black & Shaw, 161 Spring St. N.W., Atlanta; piping, mains, to W. C. Shepherd Co., 2450 Briarcliff Rd. N.E., Atlanta.

†Texas—U. S. Eng., 231 W. Main St., Denison, water storage and pump. facilities, also sewage treatment plant, Inv. 257-43-151, Collin Co., to Parrott-Oldt Co., 403 S. Haskell St., Dallas, **$100,000-$500,000.** Bids 12/2—CD 11/30.

†Texas — U. S. Eng., Fort Sam Houston, water, sewer and gas distr. sys., concrete walks. Hays Co., to Panhandle-Sira-Dalton, 3101 Elm St., Dallas, under **$50,000.**

†Tex., Garland—City gravity type rein.-con. reservoir, to W. H. Malone, 5509 Maple St., Dallas, **$14,997. FWA.**

†Utah, Monticello—Town, imprvs., WW sys., to Hatfield Constr. Co., Cortez, Colo. Federally financed.

†Va., Williamsburg—Federal Works Agency, 606 State Planters Bank Bldg., Richmond, Waller Pond Dam across Queen Creek, forming lake having 2,500,000,000 gal. storage capacity, near Magruder, to Michael Pontarelli & Sons, 4248 N. Kilpatrick St., Chicago, Ill., **$392,235;** low-head dam across Chickahominy River, near Walker, New Kent Co., to Boney Constr. Co., 2411 Kimball Terrace, Norfolk, **$181,000.** CD 11/20—ENR 11/26.

†Washington—U. S. Eng., 800 3 Ave., Seattle, well, King Co., to Patterson Drilling Co., Route 7, Box 543, Seattle, under **$50,000.**

SEWERS, WASTE DISPOSAL

PROPOSED WORK

†Mo., Neosho—City, G. Woods, mayor, rejected bids, sewage disposal plant. $262,000. Will readvertise. **FWA.** H. T. Lawrence, 3244 N.W. 14 St., Oklahoma City, Okla., engr. CD 12/9—ENR 12/17, under LB.

LOW BIDDERS

†Conn., Bridgeport—Federal Works Agency, 2 Lafayette St., New York, N. Y. Dec. 14, Broadbridge School sanitary sewer, Conn 6-107, from Clark Sewer Constr. Co., 631 Lindley St., Bridgeport, **$17,919.** CD 12/4—ENR 12/10.

†Texas—U. S. Eng., 231 W. Main St., Denison, sewage treatment plant, Smith Co., from R. E. McKee, 1918 Texas St., El Paso, **$100,000-$500,000.** Bids 12/5. CD 12/1.

CONTRACTS AWARDED

†Connecticut—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., sewerage sys., sewage disposal plant, to Pascone Bros. Inc., 73 Steuben St., Bridgeport, **$85,506.** CD 10/6—ENR 10/8.

†Florida—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, reconstructing drainage sys., Inv. NEG-JAX-43-389, Hillsborough Co., to Cone Brothers Contg. Co., Caesar Ave. and Cumberland Rd., Tampa, less than **$100,000.**

†Michigan—U. S. Eng., 700 Union Guardian Bldg., Detroit, sewer and appurtenances, existing ditch, Washtenaw Co., to R. D. Baker, 19200 W. 8 Mile Rd., Detroit, less than **$1,000,000.**

†Texas—U. S. Eng., 231 W. Main St., Denison, addnl. sanitary sewers, and water distr. lines, etc., Lamar Co., to Parrott-Oldt Co., 403 S. Haskell St. Dallas, **$50,000-$100,000.**

†Texas—U. S. Eng., Fort Sam Houston, storm sewers, drainage structures, Cameron Co., to Dodds & Wedegartner, Inc., 392 N. Bowie St., San Benito, **$50,000-$100,000.**

†Washington—U. S. Eng., 800 3 Ave., Seattle, sewers, Pierce Co., to Paine & Gallucci, 1521 S. Grant St., Tacoma, under **$50,000.**

BRIDGES, GRADE CROSSINGS

PROPOSED WORK

Oklahoma—State Hy. Dpt., Oklahoma City, received no bids Dec. 11, rein.-con. bridge over Spring Creek near Seneca Indian School, east of Fairfield. Ottawa Co. $60,000. V. T. Moon, Oklahoma City, engr. CD 12/2 under BA.

STREETS AND ROADS

BIDS ASKED

Bids Asked About December 30

Connecticut—State, W. J. Cox, hy. comr., Hartford (selected bidders), rolled bank run gravel surface treating 3,662 ft. roads, CA-WC-2 (1), Windsor and Windsor Locks. Plans deposit **$5.00.**

Bids Asked January 14

†N. C., Goldsboro—Office of District Engineer, Pub. Bldgs. Admin., 214-M Post Office, Federal Annex, Atlanta, Ga., driveway exten., addnl. mailing facilities at post office, Spec. PB-DE-4.

Bids Asked

†New Mexico—U. S. Eng., Albuquerque, asphalt and concrete paving, Eddy Co. **$200,000.** Plans deposit **$75.**

LOW BIDDERS

Maryland — State Roads Comn., Baltimore, Dec. 15, imprv. 0.652 mi. hy. along Quarantine Rd., Contr. BC-179-766, Baltimore Co., from Thomas, Bennett & Hunter, Inc., Westminster, **$76,578.** CD 12/10.

New York—President Brooklyn Boro, Boro Hall, Brooklyn, Dec. 15, constructing Brooklyn-Queens Connecting Hy., U. S. Navy Yard Sect., Contr. A, service roads, from J. Meehan & Son, 10 West St., New York, **$342,840.** CD 12/7—ENR 12/10.

New York—State Dpt. P. Wks., Div. Hys., Albany, Dec. 9, imprv. 0.34 mi. DA-SS 42-12 DA-RC 42-10, Oneida Co., from Madison County Const. Co., Inc., Madison, **$29,826,** est. $30,604; 0.22 mi. DA-SS 42-10, Erie Co., from Carl W. Stelbrecht and C. Candell, Depew, **$35,398,** est. $40,531. CD 11/24—ENR 12/3.

†Texas—U. S. Eng., 231 W. Main St., Denison, Dec. 12, roads, streets, drainage facilities, Smith Co., from McKinney Constr. Co., Marshall, **$100,000-$500,000.** CD 11/30—ENR 12/3.

CONTRACTS AWARDED

★**Oklahoma** — State Hy. Dpt., Oklahoma City, to Ottinger Bros., Petroleum Bldg., Oklahoma City, imprv. 3.9 mi. Craig Co., **$118,535,** est. $108,000; 0.513 mi. Garvin Co., **$59,597,** est. $49,500; 7.3 mi. Carter Co., **$135,930,** est. $124,000***to O. J. Pharoah, Henryetta, 3.2 mi. Mayes Co., **$95,026,** est. $80,000***to Moran & Buckner, Muskogee, 5.9 mi. Muskogee Co., **$62,451,** est. $63,500***to Henryetta Constr. Co., Henryetta, 5.8 mi. Hughes Co., **$83,974,** est. $84,000***to R. Lawson, Yukon, 3.7 mi. Roger Mills Co., **$43,370,** est. $44,500***to Gaines Bros., Miami, 4.1 mi. Craig Co., **$103,765,** est. $97,000. Grand total $702,648. Bids 12/11. Received no bids 12/11, imprv. hys. Ellis, Ottawa and Beaver Counties. V. T. Moon, Oklahoma City, engr. CD 12/2.

†Texas—U. S. Eng., Albuquerque, N. M., grading, clearing, subgrade preparation, base course, surfacing, single asphalt treatment, etc., Lubbock Co., to A. O. Peabody, Santa Fe, N. M., **$100,000-$500,000.** Bids about 12/2. CD 11/24.

EARTHWORK, WATERWAYS

BIDS ASKED

Bids Asked January 8

†California—Office Bureau Reclamation, J. C. Page, comr., Custom House, Denver, Colo., 2 coaster gates for installation at intakes of 2 of the penstocks at Shasta Dam, Kennett Div., Central Valley Project, Spec. 1053.

Bids Asked

Tex., Orange — Addnl. dikes and drainage imprvs., excavating 425,000 cu. yd. drainage ditch, 30 acres clearing, grubbing, etc. $60,000. Plans deposit $15. C. P. Smith, Bancroft Bldg., engr.

UNCLASSIFIED

PROPOSED WORK

†Texas — ELECTRICAL DISTRIBUTION SYSTEM—Pub. Housing Auth., NHA, Electric Bldg., Fort Worth, outside electrical distr. sys. $75,000, plans deposit $50; underground utilities, over $25,000 plans deposit $50, all for housing, Project Tex. 41224, Carlson, Pelich, Geren & Rady, Insurance Bldg., Fort Worth, archts. CD 12/14.

UNCLASSIFIED (Proposed Work, Cont'd.)

★†**Texas** — IMPROVEMENTS — U. S. Eng., 416 Wright Bldg., Tulsa, Okla., imprvs., expansion, installations and facilities, Gray Co. $5,000,000.

†**Pacific Northwest** — ELECTRICAL DISTRIBUTION SYSTEMS—U. S. Eng., 800 3 Ave., Seattle, Wash., electrical distr. sys., Inv. Nos. 287 and 297; bldgs., Inv. Nos. 294 and 295.

★**B. C., Vancouver**—GRADING—Bd. School Comrs., Vancouver, grading, imprv. existing and new school grounds. $300,000. H. N. MacCorkindale, supt. Schools.

BIDS ASKED

†**Texas**—FENCING—U. S. Eng., Citizens Bank Bldg., Denison, wire fencing, cedar posts, Collin Co. Plans deposit $10.

†**Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, imprvs., Brazos Co. $70,000. Plans deposit $25.

†**Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, imprvs., Cameron Co. Plans deposit $25.

†**Texas**—SPRINKLER SYSTEM—U. S. Eng., Fort Sam Houston, automatic sprinkler sys. for bldg., Spec. 42-595, Bexar Co. $25,000.

LOW BIDDERS

†**Arizona** — IMPROVEMENTS — U. S. Eng., 751 S. Figueroa St., Los Angeles, Calif., Dec. 10, imprvs., roads, No. 1000, Yuma Co., from Silver State Constr. Co., Fallon, Nev., under $500,000.

★†**Oklahoma** — IMPROVEMENTS — U. S. Eng., 416 Wright Bldg., Tulsa, imprvs., bituminous paving, Alfalfa Co. from M. W. Watson, Natl. Bank of Topeka Bldg., Topeka, Kan., $500,000-$1,000,000. CD 10/20—ENR 10/22; electrical distr. sys., Alfalfa Co., from Associated Builders, P. O. Box 4156, Oklahoma City, $50,000-$100,000.

†**Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F., Galveston, imprvs., Brazos Co., from Consolidated Constr. Co., Edna. CD 12/14—ENR 12/17.

†**Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, Dec. 11, imprvs., Cameron Co., from Dodds & Wedegartner, 382 N. Bowie St., San Benito. CD 12/7.

CONTRACTS AWARDED

†**Alabama**—RAILROAD—U. S. Eng., Gadsden, railroad, Etowah Co., to Royce Kershaw & Co., Box 21, Montgomery, $100,000-$500,000.

†**Arizona**—GASOLINE FUELING SYSTEM—U. S. Eng., 751 S. Figueroa St., Los Angeles, Calif., gasoline fueling sys., to H. B. Nicholson, 1151 S. Bway., and N. P. Van Valkenburg, 1156 S. Victoria Ave., Los Angeles, Calif. Est. under $50,000.

†**California**—IMPROVEMENTS—U. S. Eng., 751 S. Figueroa St., Los Angeles, imprvs., No. 980, Kern Co., to Dodge Constr., Inc., Fallon, Nev., under $500,000. Awarded 12/9.

†**Colorado**—FACILITIES—U. S. Eng., c/o Postmaster, Denver, facilities, Denver Co., to J. E. Roupp Constr. Co., Denver, under $50,000.

†**Florida**—GASOLINE STORAGE SYSTEM, etc.—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, gasoline storage and fueling sys., Inv. NEG-JAX-43-388, Osceola Co., to Gabel & Rosa Co., 437 W. Bay St., Jacksonville, under $50,000.

†**Florida**—GASOLINE STORAGE and FUELING SYSTEM—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, gasoline storage and fueling sys., Inv. NEG-JAX-43-383, Polk Co., to Gabel & Rosa Co., 437 W. Bay St., Jacksonville, under $50,000.

†**Florida**—IMPROVEMENTS—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, imprvs., grading, paving, Inv. NEG-MI-43-11, Dade Co., to W. T. Price Dredging Corp., 27 St., Miami, less than $100,000.

†**Florida** — IMPROVEMENTS — U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, imprvs., resurfacing, Inv. NEG-JAX-43-412, Duval Co., to Rose & Horne, Ocala, less than $500,000.

†**Florida** — IMPROVEMENTS — U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, imprvs., Pinellas Co., to Paul Smith Constr. Co., 310 N. Rome Ave., Tampa, $50,000-$100,000.

†**Florida**—PLANTING—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, grass planting, Inv., NEG-WPB-43-14, Palm Beach Co., to Mike L. Blank Nursery, Delray Beach, less than $50,000.

†**Fla., Port Everglades** — FACILITIES — Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., addnl. facilities, NOY 5621, to Fred Howland, Inc., Postal Bldg., Miami, $91,986.

†**Georgia** — IMPROVEMENTS — U. S. Eng., Post Office Bldg., Savannah, imprvs., Houston Co., to R. H. Smallings & Son, Macon.

†**Georgia**—SCARIFYING, etc.—U. S. Eng U. S. Courthouse & Post Office, Jacksonville, Fla., scarifying, blading, Inv. NEG-VA-43-15, Lowndes Co., to Coffee Constr. Co., Eastman, under $50,000.

†**Illinois** — FIRE ALARM SYSTEM — U. S. Eng., Court House & Custom House, St. Louis, Mo., automatic and/or manual fire alarm sys., St. Clair Co., to Illinois District Telegraph Co., 29 S. LaSalle St., Chicago. Est. under $50,000. (Correction—name of contractor.) CD 12/4—ENR 12/10, under CA.

†**Kansas**—IMPROVEMENTS—U. S. Eng., 601 Davidson Bldg., Kansas City, Mo., imprvs., brick, rein.-con. pumphouses, Wyandotte Co., to L. G. Barcus, 1051 State St., Kansas City, Kan. Est. $100,000. CD 12/7—ENR 12/10.

★†**Md., Curtis Bay** — IMPROVEMENTS — Yards & Docks, Navy Dpt., Washington, D. C. Improvements to NOY 6515, to Tuller Constr. Co., 95 Monmouth St., Red Bank, N. J. Est. $750,000.

†**Mississippi**—LIGHTING SYSTEM—U. S. Eng., U. S. Courthouse & Customhouse, Mobile, Ala., night lighting sys., Lowndes Co., to Dyer Electric Co., 905 S. 22 St., Birmingham, Ala., under $50,000.

★†**Missouri**—IMPROVEMENTS—U. S. Eng., P. O. Box 97, Memphis, Tenn., imprvs., Pemiscot Co., to Markham & Brown, Cape Girardeau, Mo.; fencing, to American Steel & Wire Co., 506 Olive St., St. Louis. Est. under $1,000,000. CD 11/19.

†**New Jersey**—IMPROVEMENTS—U. S. Eng., 6 and Walnut Sts., Phila., Pa., imprvs., excav., grading, paving roads, Burlington Co., to Brann & Stuart, Broad Station Bldg., Phila., over $50,000.

†**New Mexico**—FUELING SYSTEM—U. S. Eng., Albuquerque, fueling sys., Curry Co., to R. H. Fulton, Lubbock, Tex., under $50,000.

†**New Mexico** — GASOLINE FACILITIES — U. S. Eng., Albuquerque, gasoline facilities, Otero Co., to Hayner & Burn, Las Cruces, under $50,000.

★†**Oklahoma** — IMPROVEMENTS — U. S. Eng., 416 Wright Bldg., Tulsa, imprvs., bldgs., Greer Co., to Johnson, Peterson, Busboom & Rauh, Salina, Kan.; paving, to Trinidad Asphalt Mfg. Co., 600 S. Teresa St., St. Louis, Mo. Est. under $5,000,000.

★†**Tennessee** — IMPROVEMENTS — U. S. Eng., U. S. Courthouse & Customhouse, Mobile, Ala., imprvs., Shelby Co., to A. Farnell Blair, Decatur, Ga. Est. $5,000,000. CD 12/4.

†**Texas** — ELECTRICAL DISTRIBUTION — U. S. Eng., Fort Sam Houston, electrical distr. sys., Hays Co., to Williams & Whittle and Williams & Broughton, 5422 Mockinbird Lane, Dallas, under $50,000;

†**Texas** — ELECTRICAL DISTRIBUTION — U. S. Eng., Fort Sam Houston, outside electrical distr. sys., Medina Co., to Ideal Home Builders, Rte. 3, Box 405C, San Antonio, under $50,000.

†**Texas** — ELECTRICAL DISTRIBUTION — U. S. Eng., Fort Sam Houston, electrical distr. sys., Val Verde Co., to Paul Wright Electric Co., 1018 S. Presa St., San Antonio, under $50,000.

†**Texas**—ELECTRIC DISTRIBUTION, etc. —U. S. Eng., 25 St. and Avenue F, Galveston, outside electric distr. and lighting sys., Cameron Co., from Commercial Electric Co., Brownsville, under $50,000.

†**Texas**—FIRE PROTECTION-SPRINKLER SYSTEM—U. S. Eng., Fort Sam Houston, automatic fire protection sys., Brown Co., to Century Sprinkler Corp., 305 Graham St., Richmond, Va., under $50,000.

†**Texas**—IMPROVEMENTS—U. S. Eng., 231 W. Main St., Denison, imprvs., bldg., Childress Co., to Star Manufacturing Co., P. O. Box 7903, Oklahoma City, Okla., $50,000-$100,000.

†**Texas**—IMPROVEMENTS—U. S. Eng., 231 W. Main St., Denison, imprvs., Bexar, Taylor, Brown, and Val Verde Counties, to Grinnell Co., Inc., 1315 Marilla St., Dallas, under $50,000.

†**Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, imprvs., bldg., underground cable, etc., Maverick Co., to M. H. Ryland, Uvalde, under $50,000.

†**Texas**—IMPROVEMENTS—U. S. Eng., 25 St. and Avenue F, Galveston, imprvs., Tom Green Co., to Reece & Albert, San Angelo, under $50,000.

†**Texas**—OUTSIDE ELECTRICAL SYSTEM —U. S. Eng., Fort Sam Houston, outside electric sys., Bexar Co., to V. Prassel, 808 Bldrs. Exchange Bldg., San Antonio, under $50,000.

†**Texas**—RAILWAY SPUR LINES, etc.— U. S. Eng., 231 W. Main St., Denison, railway spur lines, facilities, Smith Co., to McGinnis & Grafe, Waco, $50,000-$100,000. Awarded 12/11.

†**Texas**—SPUR TRACKS, etc.—U. S. Eng., Fort Sam Houston, spur tracks, yard and switching facilities, Spec. 42-631, Coryell Co., to Martin & Grace, 710 Rio Grande Natl. Life Bldg., Dallas, $100,000-$500,000.

†**Texas**—UNDERGROUND UTILITIES—U. S. Eng., Fort Sam Houston, underground utilities, Bexar Co., to V. Prassel, 808 Bldrs. Exch. Bldg., San Antonio, $100,000-$500,000. CD 12/17.

†**Tex., Laredo**—RADIO RANGE FACILITIES—Civil Aeronautics Admin., Box 1689, Fort Worth, radio range facilities, steel towers and prefabricated steel frame bldg., Inv. 443-1437, to Schanche Engineering Co., 810 Holland Bldg., St. Louis, Mo., $33,500. Bids 11/16. CD 11/9—ENR 11/12.

†**Virginia** — ELECTRICAL DISTRIBUTION SYSTEM EXTENSION, etc.—U. S. Eng., 413 P. O. and Court House Bldg., Norfolk, alterations existing electrical distribution pipes, pump. sta. and disposal sys., Princess Anne Co., to Vanguard Const. Co., 369 Lexington Ave., New York, N. Y., $100,000-$500,000.

★†**Virginia**—IMPROVEMENTS—U. S. Eng., 415 P. O. and Courthouse Bldg., Norfolk, imprvs., incl. clearing, grading, drainage, seeding, etc., Greenville Co., to W. H. Franklin, and Highway Contractors, Inc., 422 Boush St., Norfolk, $500,000-$1,000,000.

[redacted]

PROPOSED WORK

†**Ariz., Ajo**—Pub. Housing Auth., NHA, 785 Market St., San Francisco, Calif., houses.

★†**Ariz., Bisbee**—Pub. Housing Auth., NHA, 785 Market St., San Francisco, Calif., 226 houses. (286 dormitory accommodations).

★†**Ariz., Globe** and **Miami**—Pub. Housing Auth., NHA, 785 Market St., San Francisco, Calif., 280 houses.

★†**Calif., Vallejo**—Pub. Housing Auth., NHA, 785 Market St., San Francisco, 1,000 unit two-person family units, Cal. 4511. CD 12/14—ENR 12/17.

★†**Conn., Hartford** — Pub. Housing Auth., NHA, 24 School St., Boston, Mass., 192 unit dormitory apartments and 60 family units, Conn. 6133. Golden Storrs & Co., 343 Fairfield Ave., Hartford, archt. CD 11/27—ENR 12/3.

★†**Conn., West Hartford (br. Hartford)** — Pub. Housing Auth., NHA, 24 School St., Boston, Mass., 416 unit dormitory apartments and 132 family units, Conn. 6132. Ebbets & Frid, 15 Lewis St., Hartford, archt. CD 11/27—ENR 12/3.

★†**District of Columbia** — Pub. Housing Auth., NHA, Temporary Bldg. 2, 18 and D Sts. N.W., Wash., D. C., 200 unit housing, Tunlaw Rd., DC 49061. Transferred from Md. 18221. CD 11/13—ENR 11/19, under Bethesda.

★†**Ga., Brunswick** — Pub. Housing Auth., NHA, Georgia Savings Bank Bldg., Peachtree and Broad Sts., Atlanta, 1,100 unit housing, Ga. 9126.

★†**Mich., Detroit** — Pub. Housing Auth., NHA, Barlum Tower, 700 unit housing Mich. 20089, 375 unit housing Mich. 20094, 150 unit housing Mich. 20095, and 300 unit housing Mich. 20098; 597 unit housing Mich. 20096 and 528 unit housing Mich. 20111, 1,000 two-person family units Mich. 20112.

★†**Mont., Anaconda**—Pub. Housing Auth., NHA, 201 N. Wells St., Chicago, Ill., 200 houses.

★†**N. Y. Cheektowaga (br. Buffalo)**—Pub. Housing Auth., NHA, 270 Bway., New York, 300 family units and 500 dormitory apartments, NY 30079.

★†**N. Y., Niagara Falls**—Pub. Housing Auth., NHA, 270 Bway., New York, 400 family units and 800 unit dormitory apartments, NY 30131; 350 family units and 250 dormitory apartments NY 30132.

★†**N. Y., Tonawanda**—Pub. Housing Auth., NHA, 270 Bway., New York, 400 family units housing and 600 dormitory apartments, NY 30075; 481 family units and 900 unit dormitory apartments, NY 30076.

★†**O., Cleveland**—Pub. Housing Auth., NHA, 9 St. and Prospect Ave., 440 unit housing, Ohio-33076, formerly Ohio-35073. CD 6/24—ENR 7/2.

★†**Pa., Pittsburgh**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., 500 unit temporary (instead of permanent) housing, Pa.-36172, Stowe Twp., near here. CD 12/3—ENR 12/10.

★†**Pa., Sharon-Farrell**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., 255 unit housing Pa-36371 and 125 unit housing Pa-36372, formerly 380 unit Pa-36371. CD 11/11—ENR 11/19.

★†**Washington**—Pub. Housing Auth. NHA, Skinner Bldg., 5 Ave. and Union St., Seattle, housing.

★†**Wash., Tacoma**—Pub. Housing Auth., NHA, Skinner Bldg., 5 Ave. and Union St., Seattle, 364 unit housing, Wash-45018. Formerly Wash-45018 and Wash-45019. CD 12/9—ENR 12/17.

★†**Wash., Vancouver**—Pub. Housing Auth., NHA, Skinner Bldg., 5 Ave. and Union St., Seattle, 200 unit temporary housing, Wash. 45172, 700 unit temporary housing Wash-45173, 300 unit temporary housing Wash-45174, 2,100 unit temporary housing, Wash-45175, 1,500 unit temporary housing, Wash-45176 and 1,190 unit temporary housing, Wash-45177. Formerly under Portland, Ore. CD 11/2—ENR 11/5 under BA.

★**B. C., Vancouver**—Bd. School Comrs., Vancouver, 2 technical schools, 1 in westerly and other in southeastern sect. city. $1,800,000. H. N. MacCorkindale, supt. Schools.

PUBLIC BLDGS. (Cont'd.)

BIDS ASKED

Bids Asked After December 17

★†**Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., dwellings, Pa. 36269. Savery, Sheetz, Gilmore & Associates, 21 S. 12 St., Phila., archts.

Bids Asked After December 21

★†**Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., temporary housing, Pa. 36362. Davis & Dunlap, 1717 Sansom St., Willing, Sims & Talbutt, 2008 Architects Bldg., all Phila., archts. CD 12/3—ENR 11/19.

Bids Asked After December 22

†**Illinois**—Defense Plant Corp., 811 Vermont Ave. N.W., Wash., D. C., conversion of plant. Industrial Company will operate. Over $150,000.

Bids Asked December 28

†**Connecticut**—Bristol Housing Auth., City Hall, Bristol, community bldg., athletic field, etc. for housing for NHA. D. Orr & R. W. Foote, 96 Grove St., New Haven, archts. Plans deposit $50, 1st set and $10 each addnl. set.

★†**Pa., Pittsburgh**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., 400 unit temporary (instead of permanent) housing, Pa-36106. Flynn & Eagen, McKeesport, archts. CD 12/3—ENR 12/10.

★†**Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., temporary housing, Pa. 36257. Keast & Carroll, 1501 Commonwealth Bldg., Phila., archts. CD 12/3—ENR 11/19.

†**Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., housing, Pa. 36361. Zantzinger & Borie, Architects Bldg., Phila., archts. CD 12/3—ENR 12/10.

Bids Asked January 1

†**Texas**—Pub. Housing Auth., NHA, 1309 Electric Bldg., Fort Worth, housing Tex. 41-083 and dormitory housing, Tex. 41-084. Tentative date. E. F. and J. F. Rittenberry and J. Roy Smith, 1000 Fisk Bldg., Amarillo, archts. CD 11/30—ENR 12/3.

★†**Texas**—Pub. Housing Auth., NHA, 1309 Electric Bldg., Fort Worth, dormitory apartments, Tex. 41362 and Tex. 41363; housing, Tex. 41364 and Tex. 41365. Tentative date. CD 12/14—ENR 12/17.

Bids Asked After January 2

★†**Pennsylvania**—Pub. Housing Auth., NHA, 270 Bway., New York, N. Y., housing, Pa. 36363. L. Magaziner, F. E. Hahn, S. Abramson and office of H. Trumbauer, 1701 Walnut St., Phila., archts. CD 12/3—ENR 12/10.

Bids Asked January 5

★†**Utah**—Pub. Housing Auth., NHA, Dierks Bldg., Kansas City, Mo., frame housing, $500,000. Burns & McDonnell Eng. Co., 107 N. Linwood Blvd., Kansas City, Mo., archts. CD 12/3—ENR 12/10.

Bids Asked

†**Connecticut**—U. S. Eng., 819 Industrial Trust Bldg., Providence, R. I., (selected list bidders) bldg., Conn 699-43-138, Hartford Co.

★†**Conn., East Hartford (br. Hartford)**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., 304 dormitory apartments, and 94 family units, Conn-6129. Mylchreat & Reynolds, 239 Palm St, Hartford and Keith Sellers Heine, 101 Mohawk Dr., West Hartford, archts. CD 12/11—ENR 12/17.

★†**Conn., East Hartford (br. Hartford)**—Pub. Housing Auth., NHA, 24 School St., Boston, Mass., 257 dormitory apartments, and 76 family units, Conn-6131. C. J. Malmfeldt, 36 Pearl St., Hartford, archt. CD 12/2—ENR 12/10.

★†**Conn., West Hartford (br. Hartford)**—Public Housing Auth., NHA, 24 School St., Boston, Mass., 216 unit dormitory apartments, 54 family units, Conn-6134. M. Moore & C. Salsbury, 967 Farmington Ave., West Hartford, archts. CD 12/11—ENR 12/17.

†**Md., Pt. Sellers**—Federal Works Agency, 1800 F St. N.W., Wash., D. C., 1 story, basmt., school. H. Robinson, 1927 11 St. N.W., Wash., D. C., archt.

†**Massachusetts**—Pub. Housing Auth., NHA, 24 School St., Boston, administration and community bldg. for housing, Proj. Mass. 19061. J. H. Ritchie, 20 Newbury St., Boston. CD 11/27—ENR 12/3.

†**Moptana**—Great Falls Housing Auth., Great Falls, housing, for NHA. $350,000. A. V. McIver, Strain Bldg., Great Falls, archt. CD 11/4—ENR 11/12.

★†**Texas**—U. S. Eng., Fort Sam Houston, bldgs., Spec. 42-388, Bell Co., $2,500,000. Plans deposit $100.

†**Texas**—U. S. Eng., Fort Sam Houston, housing, Spec. 42-653. $150,000.

†**Texas**—U. S. Eng., 25 St. and Avenue F, Galveston, bldgs., facilities, Cameron Co. Over $150,000. Plans deposit $25.

LOW BIDDERS

★†**California**—U. S. Eng., 751 S. Figueroa St., Los Angeles, D. C. 14, bldg., No. 981, San Bernardino Co., from Jas I. Barnes Constr. Co., 1119 Montana Ave., Santa Monica, under $1,000,000.

★†**Virginia**—Pub. Housing Auth., NHA, Temporary Bldg., 2, Wash., D. C., 500 unit, Columbia Pike Housing, Va. 44018, from T. Calvin Owens, 814 Albee Bldg., Wash., D. C. $1,413,000.

†**Pa., Rochester**—Federal Works Agency, 2 Lafayette St., New York, N. Y., construction and addns. General Hospital, from D. T. Riffle, 1006 Forbes St., Pittsburgh, $161,266. CD 12/15—ENR 12/17.

†**Va., Norfolk**—At office Rudolph, Cooke & Van Leeuwen, archts., Arcade Bldg., Dec. 10, Sara Leigh Hospital, Va. 44-152, for Leigh Memorial Hospital, from W. T. Gregory Constr. Co., Flat Iron Bldg., $319,800. FWA. CD 12/9—ENR 12/3.

★†**Wyoming** — Pub. Housing Auth., NHA, Dierks Bldg., 10 St. and Grand Ave., Kansas City, Mo., Dec. 14, housing, miscellaneous bldgs., Wyo-48011, from Mead & Mount, Denver Natl. Bank Bldg., Denver, Colo. Est. $1,500,000. CD 12/8.

CONTRACTS AWARDED

★†**Ala., Mobile**—Mobile Housing Auth., 600 N. Joachim St., Mobile, general contract, incl. site imprv., plumbing, heating, electrical work and landscaping 1,214 war apartments, Ala-1106-A, to Peyton Higgison, 59½ St. Francis St., and Hancock Co., 310 St. Michael St., est. $1,864,142 plus fixed fee $58,000; 262 war apartments, Ala-1106-B, 432 war apartments, Ala-1106D and 240 dormitory units, Ala-1107-B, to K. R. Giddens, 1st Natl. Bank Bldg., and J. E. Pate Constr. Co., Annex 1st Natl. Bank Bldg., est. $1,092,000 plus fixed fee $39,000, for NHA. CD 12/7—ENR 12/10, under CA.

†**Arkansas**—U. S. Eng., 300 Bway., Little Rock, bldg., Lawrence Co., to Linebarger Const. Co., Insurance Bldg., Little Rock, under $200,000. Awarded 12/7.

†**California**—U. S. Eng., 751 S. Figueroa St., Los Angeles, bldg., No. 998, San Bernardino Co., to Meyer-Nash, 1414 Hollywood Way, Burbank, over $100,000. Awarded 12/14.

†**California**—U. S. Eng., 74 New Montgomery St., San Francisco, bldg. expansion, Monterey Co., to H. C. Geyer, 787 Munras Ave., Monterey. Awarded 12/14.

†**Florida**—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, bldgs., Inv. NEG-JAX-42-403, to Watt & Sinclair, of Florida, Inc., 207 Royal Palm Way, West Palm Beach, less than $500,000; clearing, grubbing, grading, draining, paving roads, Inv. NEG-JAX-43-402, to Simpson Constr. Co., Daytona Beach, less than $50,000, both projects in Volusia Co.

†**Florida**—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, bldgs., Inv. NEG-JAX-43-395, Orange Co., to E. T. Clauson, 1515 12 St. N., St. Petersburg, less than $500,000.

†**Georgia**—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, Fla., addnl., bldgs., Thomas Co., to B. L. Brewton & Sons, Thomasville, under $50,000; imprvs., Thomas Co., to P. E. Jinright, Thomasville, $50,000-$100,000.

†**Georgia**—U. S. Eng., U. S. Courthouse & Post Office, Jacksonville, Fla., addnl. bldg., Lowndes Co., to J. N. Bray Constr. Co., Valdosta.

†**Georgia**—U. S. Eng., Warner Robins, bldgs., Houston Co., to Henry A. Ivey Co., 339 E. College Ave., Decatur.

†**Kansas**—U. S. Eng., 10 E. 17 St., Kansas City, Mo., bldg., Leavenworth Co., to Hiram Elliott Constr. Co., 1016 Baltimore Ave., Kansas City, Mo.; bldg., addn., alterations, to Fleet Constr. Co., 4505 Troost Ave., Kansas City, Mo. Est. under $200,000.

†**Louisiana**—U. S. Eng., 25 St. and Avenue F, Galveston, Tex., bldgs., Inv. 43-202, to G. F. Favrot, Balter Bldg., New Orleans. Bids and awarded 12/10. CD 12/8.

★†**Michigan**—U. S. Eng., 700 Union Guardian Bldg., Detroit, t.o. mess bldg., Washtenaw Co., to J. A. Utley, 723 E. 10 Mile Rd., Detroit, less than $1,000,000.

†**New Jersey**—U. S. Eng., 6 and Walnut Sts., Phila., Pa., bldgs., Monmouth Co., to James Sutherland, Inc., 244 Main St., Asbury Park, $100,000-$500,000.

†**New Mexico**—U. S. Eng., Albuquerque, bldgs., Chaves Co., to Maxey & Leftwich, Lubbock, Tex., $100,000-$500,000. Awarded 12/8.

★†**New York**—U. S. Eng., Chimes Bldg., Syracuse, bldg., Oneida Co., to John A. Johnson & Sons, 268-41 St., Brooklyn, $1,000,000-$5,000,000. CD 10/29—ENR 11/5.

†**Pennsylvania**—Industrial Company, locker rooms, to George H. Evans Co., 1126 Fairmount Ave., Phila., $50,000. Federally financed.

†**Rhode Island**—U. S. Eng., 819 Industrial Trust Bldg., Providence, bldg., facilities, No. 699-43-118, Newport Co., to Dimeo Constr. Co., 75 Westminster St., Providence. Est. under $50,000. Bids 12/2.

†**S. C., Charleston**—Yards & Docks, Navy Dpt., 18 St. and Constitution Ave. N.W., Wash., D. C., bldgs., roads, etc., NOY 5812, to C. M. Guest & Sons, Box 196, Anderson, $198,429.

★†**Texas**—Pub. Housing Auth., NHA, 1309 Electric Bldg., Fort Worth, permanent housing, Tex. 41331, to Thurman & Ostrom, P. O. Box 1070, Borger, $573,007. CD 11/17—ENR 11/19, under LB.

†**Texas**—U. S. Eng., 231 W. Main St., Denison, military housing, recreation bldgs., etc., No. 257-43-147, Potter Co., to Tracy Construction Co., Colcord Bldg., Oklahoma City, Okla., $100,000-$500,000. CD 11/27—ENR 12/3.

†**Texas**—U. S. Eng., Fort Sam Houston, bldg., and outside electrical distr. sys., Bexar Co., to Myer & Wentworth, 1766 Division Ave., San Antonio, $50,000-$100,000 and under $50,000 respectively.

†**Texas**—U. S. Eng., Fort Sam Houston, addnl. work for bldgs., Bexar Co., to G. W. Mitchell, Builders Exchange Bldg., San Antonio, $100,000-$500,000. CD 12/14 — ENR 12/17, under CA.

†**Texas** — U. S. Eng., Fort Sam Houston, housing, to Leslie F. Crockett, 112 Academy Dr., Austin, $100,000-$500,000; low pressure chamber, to C. L. Browning, 812 Insurance Bldg., San Antonio, under $50,000.

†**Texas**—U. S. Eng., Fort Sam Houston, shop, Bexar Co., to W. A. Farrington, 907 Donaldson St., San Antonio, under $50,000.

★†**Utah**—U. S. Eng., 32 Exchange Pl., Salt Lake City, addnl. facilities, Tooele Co., to R. D. Merrill, Helena, Mont., under $800,000. Bids 10/20.

†**Utah**—U. S. Eng., 32 Exchange Pl., Salt Lake City, bldg., to MacIsaac, Menke & Pozzo, c/o Hotel Utah, Salt Lake City; lighting sys., to Ogden-Cache Electric Co., Ogden, under $1,000; heating, to Pacific Electrical & Mechanical Co., Ogden, under $100,000, all Weber Co. Bids 11/24.

†**Virginia**—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., bldg., Arlington Co., to John McShain, Inc., 17 and Spring Garden Sts., Phila., Pa. $100,000-$500,000.

†**Virginia**—U. S. Eng., 1 and Douglas Sts. N.W., Wash., D. C., housing, Warren Co., to W. B. Avery, 629 F. St. N.W., Wash., D. C., $100,000-$500,000.

†**Va., Portsmouth** — Pub. Bldgs. Admin., North Interior Bldg., Wash., D. C., nurses' home at King's Daughters Hospital, Va-44-188, to W. T. Gregory Constr. Co., Flat Iron Bldg., Norfolk, $415,000. FWA. Bids 12/11. CD 12/9.

[redacted]

PROPOSED WORK

N. J., Somerville — **Parkside Apartments**, Inc., c/o McMurray & Schmidlin, archts., 968 Stuyvesant Ave., Union, 4 apartment bldgs. $165,000.

Pa., Phila.—L. Mittelman, 5113 D St., plans by C. H. Fries, Beury Bldg., 21 two story duplex housing, 10 St. and Chelten Ave.

BIDS ASKED

Tex., San Antonio—G. S. McCreless, 315 Natl. Bank Commerce Bldg., 25 duplexes, 2 story, frame. $200,000 incl. underground utilities, etc.

CONTRACTS AWARDED

Calif., San Leandro—C. E. Daly, 366 Monticello St., San Francisco, 5 room residences. Owner builds. Over $150,000.

Mo., Webster Groves—Casilly Construction Co., 704 S. Berry Rd., 25 bungalows, Lanvale, Cornell and Innisfail Drs., separate contracts. $150,000.

N. J., New Brunswick—Hamilton Estates, 125 E. 170 St., New York, N. Y., 2 story, bsmnt., 7 unit, brick, frame, apartment, irregular sized, separate contracts. $165,000. I. Naftali, 900 Bergen Ave., Jersey City, archt. CD 11/20—ENR 11/26.

[redacted]

PROPOSED WORK

N. J., Irvington—RAILROAD HOUSE, etc. Gould & Eberhardt, 428 Fabyan Pl., 1 story, concrete block railroad house and lumber shed. $40,000.

N. J., Port Reading—BOILER HOUSE—Reading Co., A. E. Owen, ch. engr., Reading Terminal, 12 and Market Sts., Phila., Pa., soon lets contract 1 story, concrete, brick boiler house.

Pa., Phila. — FREIGHT HOUSE — Reading Co., A. E. Owen, ch. engr., Reading Terminal, 12 and Market Sts., freight house, Oak Lane.

CONTRACTS AWARDED

Mo., St. Louis—PACKING PLANT—Krey Packing Co., 2100 Bremen Ave., altering constructing, meat packing plant addn., to Woermann Constr. Co., 3800 W. Pine Blvd., Est. $40,000 incl. equipment. Henschein, Everds & Crombie, 59 E. Van Buren St., Chicago, Ill., engrs. and archts.

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Bids: December 30

Water Main

FEDERAL WORKS AGENCY PROJECT NO. MD. 18-175
WASHINGTON SUBURBAN SANITARY COMMISSION

Sealed bids for Contract No. 3, Federal Works Agency Project Md. 18-175 for the construction of approximately 3,745 feet of 16-inch and 25 feet of 6-inch cast iron water mains will be received by the Washington Suburban Sanitary Commission, at the office of the Commission, Hamilton Street, Hyattsville, Maryland, until 3:00 P. M., Eastern War Time, Wednesday, December 30, 1942, and then at said office, publicly opened and real aloud.

The information for bidders, form of bid, form of contract, plans, specifications, and forms of bid bond and performance bond may be examined at said office and copies thereof obtained upon payment of $5.00 for each set. Any bidder, upon returning such set promptly and in good condition, will be refunded his payment, and any non-bidder upon so returning such set will be refunded $5.00.

The Washington Suburban Sanitary Commission reserves the right to waive any informalities in or to reject any or all bids.

Each bidder must deposit with his bid security in an amount of not less than five per centum (5PC) of the base bid in the form and subject to the conditions provided in the information for bidders.

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the contract.

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Perry Boswell
J. Donald Clagett
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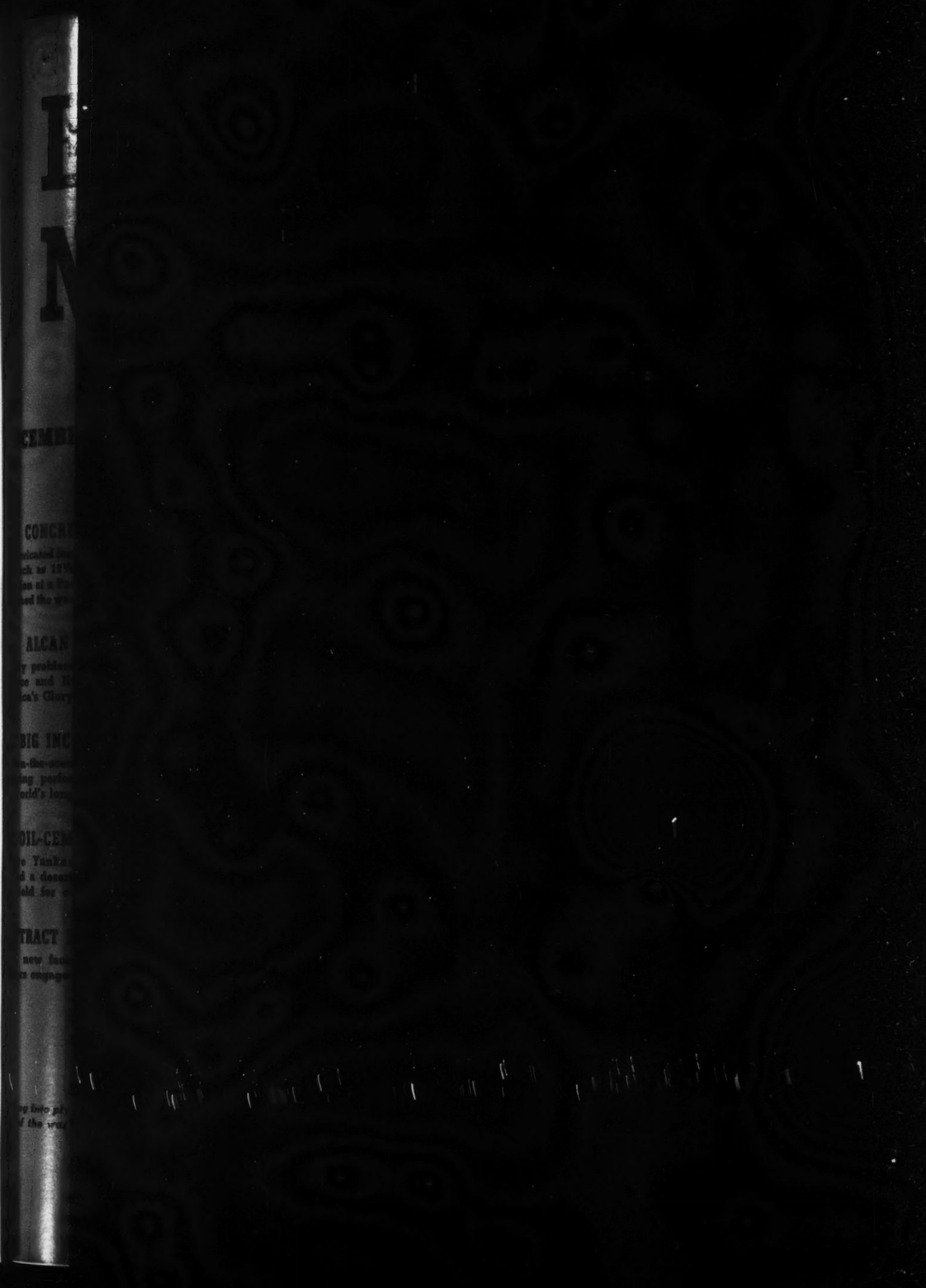
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